

Historic, Archive Document

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62.23 Our cold house of July 30 shading; photoed Oct. 10th. Details, page 3.

There are a number of important factors involved in growing a uniformly good crop of mums at a profit. With exactly 50 years experience growing mums we have attempted to discuss this subject on forward pages. Our suggestions might or might not fit your conditions, but you will be interested in looking them over. To continue supplying you with rooted cuttings, we realize that the business must be profitable to you. We'll do all we can to make it so. Let us hear from you.

Better Mums for 1941

Gro. J. Ball
INC.
WEST CHICAGO
ILLINOIS

NOTE—PLEASE

While our equipment and stock for supplying mum cuttings is improved annually as it should be, we strongly urge the importance of **PLACING ORDERS EARLY**. While we watch the behavior of varieties, especially the newer ones, and the market demands in all parts of the country, it is impossible to accurately anticipate varieties that will be most wanted.

This results in unexpected demands and shortages of some varieties. For this reason, get your mum list in early as you can, bearing in mind that all orders are filled in the rotation received. We will not make exceptions to this rule.

We insist on thoro State inspection of all our propagating stock, especially for midge. This enables us to guarantee all stock furnished by us to be clean, free of disease or insects, well rooted, and carefully packed.

GEO. J. BALL, Inc.

INSTRUCTIONS FOR ORDERING

NOTE: When arrangements are made to ship cuttings on open account, it is understood they are sold on strictly 60 days net basis. The close margin under which these cuttings are sold, makes these terms necessary.

SPECIAL EARLY ORDER DISCOUNT. When an order is placed two months, or more, in advance of delivery date, a discount of 5% is allowed, **provided delivery date is April 1st, or later.** Be sure to show on your order, date cuttings are to be shipped.

Special Discounts for Large Orders: The following discounts, for quantities given, will apply on orders placed **at one time** for the quantity on which discount is taken.

5% discount for an order of 10,000
7½% discount for an order of 25,000
10% discount for an order of 50,000

	Rate per 100	Rate per 10	Rate per 100	Rate per 10
Please note schedule at right showing rates per 100 and corresponding rates per 10. We do not supply less than 10 of any variety , except first year Novelties.	\$ 3.00	\$.50	\$ 7.00	\$1.25
	4.00	.50	8.00	1.50
	5.00	1.00	10.00	1.50
	6.00	1.00	12.00	2.00
			15.00	2.50

VERY IMPORTANT In order to produce cuttings at present prices, the business is run on a very close margin. For this reason we **cannot** break bundles of 25 cuttings as it adds considerable to the cost.

Please note, therefore, following rule will apply on all orders:

When less than 25 of a variety is ordered they will be billed at the ten rate, as per table shown above.

If order totals less than 1000, 25 of a variety will be billed at the 100 rate.

When more than 25 of a variety is ordered quantity **MUST BE IN MULTIPLES OF 25**, (meaning 50, 75, or 100).

250 of one variety will be billed at the 1000 rate.

PLEASE NOTE If your order should total 900 cuttings (for example: 100 each of 9 varieties at \$3.00, total is \$27.00) while if 1000 are ordered, the thousand rate would apply. This point should be watched in figuring your order so that you may have advantage of the thousand rate on the entire order. **WATCH THIS.**

If order is wanted C.O.D. be sure to enclose check for at least 50% of the amount.

SHIPPING INFORMATION All our stock is propagated at Barberton, Ohio, from where it is shipped by Express **COLLECT**.

If cuttings are wanted by Parcel Post, add sufficient postage as all prices are figured F.O.B. Barberton, Ohio. Approximate weights of cuttings are as follows: 50 cuttings, 2 lbs.; 100, 4 lbs.; 500, 15 lbs.; 1000, 24 lbs. You can secure the amount of postage necessary from your local Post Office.

TO OUR CANADIAN CUSTOMERS Be sure to get a permit from your Department of Agriculture at Ottawa. As all shipments go by Express, you are to forward us the **PERMIT NUMBER ONLY**, holding the permit itself which is necessary to clear the shipment from customs on arrival. In case of Parcel Post shipments, apply for a Parcel Post Permit, and send the label to us with your order.

MONEY IN MUMS

THAT FRONT COVER
is of a Flexo-glass covered house we started shading July 30, photoed October 7. Apricot Queen (light bronze) two to a plant in the foreground, Albatross on right. Also don't overlook our secretary "Helen" and the widely known "Charley" Newbold, our plant sales manager.

When properly managed there is a margin of profit in this crop. Our cost accounting clearly shows this. But if such details as timely planting, spacing, soil, midge, and varieties are not properly attended to, the profit margin can quickly disappear—might even turn into a substantial loss. To make a profit they must not be treated as a catch crop. When a lot turns out to be a loss, as does happen with us at times, the reason can usually be traced back to a preventable cause, —late planting, weak or diseased spots in the

bed, or midge. When we have to fight this pest all summer we don't sometimes realize the cost in time and material that it is piling up against the crop. The use of improved varieties does frequently make the difference between profit and loss. If you are skeptical on this, just remember that real improvements are coming out annually and that live growers are watching for them: and that on an open market the variety that is just a little better sells first: any experienced shipper knows what that can mean to returns. True, a new variety might occasionally be gotten that doesn't click as well with us as with the originator; but it is our experience that many failures with new ones is due to inferior culture.

Another cost item that might easily be overlooked, without a cost finding system, is that of young stock. It is a fact that many large growers who figure costs and the advantages of having their cuttings delivered the day planned for them are ordering their mum cuttings thru this catalog. When mums are propagated early, planted out or potted, and topped and again planted in May or June, they have run up a substantial cost, but the heaviest is the fact that such stock will not usually start off and continue growing as free as cuttings right out of the sand—delivered the day you want 'em: besides planting cuttings directly reduces labor costs to a minimum, and to make a profit on mums or any crop, every cost must be studied. Uniformly good quality is of first importance but it means nothing if it doesn't leave you a margin. Whether your requirements are 10 or 100,000, we want to hear from you.

The Novelty Section

has been omitted from this catalogue. A circular, listing this year's introductions with full descriptions will be issued after the current blooming season.

NOTE: These 3 index pages showing names of all varieties of mum with page numbers are for use in locating any certain variety as it is arranged alphabetically, while in the regular listing of varieties they are all arranged in order of blooming dates.

A		Bronze Supreme	16	December Beauty	8
A. Barham	18	Bronze Turner	10	December Glory (Large)	8
Absolute	15	Bronze Tuxedo	16	December Glory (Pomp.)	12
Acacia	17	Brown Button	19	December Gold	12
Adelaide	13	Brutus	21	Derigold	11
Agappina	19	Burgundy	19	Detroit News	9
Agnes S. Clark	18	Butler's Caprice	21	Diana	19
Albatross	8	Buttercup	12	Distinction	9
Albert Muller	18	Butterfly	11	Dorothy Nehrling	14
Algonquin	17	C		Dorothy Turner	13
Alice	14	Caliph	19	Dr. Enguehard	9
Alice Benson	10	Camilla	8	Dr. J. M. Inglis	10
Aladdin	18	Campfire	14	Dusky Maid	13
Aloma	15	Canary	12	E	
Amaranthea	14-21	Captain Blood	13	Earliwhite	12
Ambassador	8	Captain Cook	13	Early Bronze	18-20
Amelia (See Pinkcushion)	18	Captivation	17	Early Frost	8
Amoskeag	18	Cardonia	7	Early Garza Supreme	16
Angello	14	Carlina Lee	13-20	Early Yellow	17-20
Anna	19	Carnelia	15	Eden	18
Anna Kaskas	9	Carrie	17	Edgar Stillman Kelly	8
Ann Miller	18	Catherine	13	Edgar A. Guest	19
Antarctic	8	Cavalcade	13	Edith Newberry	13
Aphrodite	19	Cavalier	19	Edwin Seidewitz	9
Apollo	18	Celestra	7	Elena	18
Apricot Queen	9	Ceres	17	Elizabeth McDowell	15
Arcadia	12	Charter Oak	15	Elizabeth Peterson	13
Autumn Glow	21	Chas. Rager	8	Elora	12
Autumn Lights	18	Chas. W. Johnson	8	Elsa Piel	17
Avalon	13	Chattanooga	8	Ember	18
B		Chicago Pearl	12	Emmet	18
Baby	20	China Rose	17	Ermalinda	14
Ball of Gold	12	Christina	8-20	Estrelita	16
Barbara Cummings	17	Christmas Cheer	12	Ethel	13-21
Barnegat	17	Christmas Gold	12	Ethelda	21
Beautiful Lady	17	Chrome Emerald	16	F	
Benoit	21	Chrysolora	7	Fairy Queen	15
Benten	11	Cincinnati	20	Faith Engel	16-20
Bess Witt	10	Citronella	7	Favorite	8
Betsy Ross	8	Citrus Queen	16	Fawn	15
Betty Rose	16	Clara Curtis	18	Fez	13
Betty Watkins	13	Clara Holford	15	Fire Ball	14
Big Baby	12	Clara Jameson	13	Fire Bird	13
Blanche	16	Colonel F. M. Alger	7	Flashlight	19
Blaze	15	Columbus Dispatch	7	Floradora	21
Blazing Gold	7	Comet	7	Floyd Gibbons	9
Bobbie	12	Coral Blaze	16	Francis Whittlesey	18
Bobette	14	Cora Peck Buhl	11	Freida	17
Bonnaffon DeLuxe	20	Cora Scovil	16	Friendly Call	8
Bonnibell	13-20	Cordova	12	Friendly Rival	7
Bonnie Maid	13	Corona	7	G	
Bridal Bells	12	Country Girl	19	Ganna	19
Bright Light	20	Crimson Glory	19	Garnet King	9
Bright Spot	14	Crimson Glow	17	Garza Supreme	16
Brilliancy	19	Crimson Splendor	19	Geronimo	18
Bristolite	13	Crystal Jewell	12	Glada	18
Bronze Beauty	13	Crystal White	12	Gladys Duckham	15
Bronze Buckingham	15-21	D		Gladys Pearson	9
Bronze Chadwick	9	Dainty Maid	12	Gleam	16
Bronze Cushion	18	Daphne	19	Gleam o' Gold	17
Bronze Daisy	15	Dark Pink Jewell	13	Glitters	9-21
Bronze Doty	13	Dark Pink Norma	17	Glow	13
Bronze Frick	9	Dark Pink Supreme	17	Goblin	18
Bronze Lode	8-20	Dark Pink Valencia	15	Gold Coin	12
Bronze Mistletoe	9	Dawn	15	Gold Drop	11
Bronze Norma	16	Dazzler	19	Gold Finch	11
Bronze Prince	21	D. Baker	15	Gold Lode	7-20
Bronze Queen	13	Deanna	19	Gold Tips	13

Golden Celebration	7	Jean Treadway	19	Masterpiece	14-21
Golden Chadwick	8	Jemima	13	Mefo	8
Golden Fairy	11	Jessie (See Madeline)	13	Melba	15-21
Golden Glory	7-20	Jewell	13-21	Melody	19
Golden Glow	7	Joan Piper	15	Mercury	18
Golden Herald	11	Joan Wells	13	Minong	12
Golden Majestic	10	Joe Beuerlein	15	Miss Flora Bowers	8
Golden Mensa	15	J. R. Booth	10	Miss Gena Harwood	11
Golden Mistletoe	8	Jubilee	7	Modena	12
Golden Modena	12	Judith Anderson	17-20	Mohawk Chief	9
Golden Mrs. Ross	8	June Arnold	10	Monument	8
Golden Nymph	13	Justrite	9-21	Mother of Pearl	14
Golden Oak	9	J. W. Prince	9	Mrs. Beu	13-21
Golden October	7			Mrs. Bulkeley	14
Golden Pearson	8	K		Mrs. Chas. Wylie	16
Golden Pride	10	Katherine Johnston	13	Mrs. Darling	15
Golden Sceptre	12	Kathleen Thompson	21	Mrs. Firestone	10
Golden Splendor	11	Keystone	9	Mrs. Godfrey	15
Golden Spray	11-20	Kimie	10	Mrs. Hooker	14
Golden Wave	7-20	King Cushion (See Bronze Cushion)	18	Mrs. Kidder	7
Good News	7	King Midas	17	Mrs. Leeds	10
Governor Green	9	Kuzuka	19	Mrs. Mason	10
Governor Lake	13			Mrs. Rotan	17
Graceland	16-20	L		Mrs. Roy	9
Grace Sturgis	10	Laelia	21	Mrs. Stahelin	9
Granny Scovill	18	La France	10	Muldoon	19
Grenadier	14	Lavender Lady	19	Murillo	19
Greta	12	Legal Tender	13	Muskogee	18
Gretchen Piper	15	Leileh	13	Muskoka	13
Greystone	21	Leroy Zang (See Golden Pearson)	8	N	
Gypsy	21	Lighthouse	15	Nagiroc	10
Gypsy Girl	19	Lila Lilly	20	Nancy Copeland	19
	H	Lilac Caprice	21	Natoma	14
Harmony	13	Lillian Doty	14	Nellie Kleris	14
Harvard	9-21	Lilyan	19	New York	13
Harvest Moon	10	Linda Lou	17	Niobe	18
Hasegawa Gold	12	Little America	16	Norma	17
Hasegawa Pink	15	Little Amethyst	21	Normandie	18
Hasegawa Poinsettia	15	Little Bob	18	November Bronze	13
Hebe	19	Lois	11-20	Nubian	13
Helen Frick	9	Long Island Beauty	17	Nuggets	11-20
Helen Hubbard	14	Long Island Sunshine	12	O	
Helios	16	Lorelei	17	Oak Leaf	9
Highlights	14	Loretta	8	Oconto	8
Hilda Bergen	9	Loris	13	October Pink	15
Honey Dew	7	Louisa Pockett	10	October Rose	9
Hope Engel	21	Louise Schling	18	Ohio State	20
	I	Lustre	9	Ohkwan	10
Ida Improved	11		M	Old Rose	9
Ida Skiff	15	Madeline (See Jessie)	13	Olivia	14
Improved December Beauty	8	Majestic	10	Orange Wonder	18
Improved Tobin's Late Yellow	8	Major Bonnaffon	7	Orchid Beauty	17-21
Improved W. H. Waite	10	Major Bowes	9	Orchid Queen	9
Improved Yellow Chatta-	8	Malinta	18	Orion	17
nooga	8	Manantico	18	Otsego	18
Indianapolis Bronze	9	Mandarin	18	P	
Indianapolis Pink	9	Margo	21	Pale Moon	17
Indianola	8	Margot	18	Panola	18
Indian Chief	9	Marian Uffinger	10	Pagosa	14
Indian Summer	18	Marianna	12	Passumpsic	19
Innocence	18	Marie de Petris	8	Patricia Grace	10
Irene	12-20	Marie Tashima	10	Patsy Dowd	14
Irene Hayes	16	Marietta	16	Patty	21
Irene Rich	14	Marisa	18	Pearl	12
Izola	21	Maritza	16	Peggy Ann Hoover	11
	J	Marketeer	8	Peggy Poesch	13
Jack Bannister	17	Mars	19	Penguin	12
Jane	15	Mary Lennon Hall	11	Persian Rose	13-21
Jane Harte	19	Mary Pickford	12-20	Peter John	9
Japanese Maiden	11	Masaka	11	Pink Beauty	21
Jean Cummings	18	Mason's Bronze	15	Pink Chadwick	9

Pink Chief	9	Sam Caswell	10	W	
Pink Cushion (See Amelia) ..	18	Sandra	19	Western Beauty	14
Pink Delight	9	Saturn	18	White Anemone	16
Pink Dot	14	Sea Gull	12	White Caprice	20
Pink Lustre	18	Secretary Nehrling	7	White Chadwick	8
Pink Mistletoe	9	Seminole	18	White Chief	8
Pink Pearl	13	September Queen	18	White Chieftain	8
Pink Spoon	19	Shasta	16	White Cushion	18
Pink Treasure	9	Silver Ball	12	White Distinction	8
Pink Turner	10	Silver Bells	12	White Doty	12
Pirate Gold	13	Silver Drops	11	White Frick	8
Pohatong	19	Silver Emblem	15	White Godfrey	15
Pomponette	20	Silver Sheen	8	White Gull	18
Pride of Tokyo	11	Silver Star	12	White Izola	20
Princeton	13	Silver Tips	14	White Jewell	12-20
Prosperity	14	Smith's Early White	8	White Mensa	15
Provence	18	Smith's Innocence	16	White Mistletoe	8
Psyche	18	Smith's Late White	8	White Norma	16
Purple Caprice	21	Smith's Superlative	7-20	White Pearl	12
Pygmy	21	Snow	12	White Sensation	10
Pygmy Gold	17	Snow Cloud	12	White Spoon	18
Q		Snow White	8	White Supreme	16
Quaker Maid	8	Sonia	19	White Tonquin	12
Queen Cushion (See White		Sonoma	18	White Yuletide	12
Cushion)	18	Source d' Or	13	W. H. Buckingham	15-21
Queen of Pinks	21	Stately White	8	Whittier	7
R		Stoplight	17	W. H. Lincoln	20
Radiant	15	Sunburst	15	W. H. Waite	10
Rayonnante (See Patricia		Sunglow	7	Wildfire	13
Grace)	10	Sun Gold	8-20	William Didden	7
Red Beu	13-21	Sunkist	18	William Turner	10
Red Cushion	19	Sunny Boy	15	Winnetka	18
Red Daisy	15	Sunray	20	Woburn	15
Red Doty	14	Sunshine	16	Wolverine	17
Red Flare	19	Suntan	13	Y	
Red Hussar	19	Susanne Miller	16	Yababuki	10
Red Izola	21	Swan	16	Yellow Ambassador	7
Red Majestic	10	Symphony	19	Yellow Beauty	20
Red Melba	15-21	T		Yellow Blanche	16
Red Princeton	14	Tagoya	15	Yellow Caprice	20
Red Rolinda	16-21	Tango	13-20	Yellow Chattanooga	8
Red Rover	15	Tasiva	18	Yellow Cordova	12
Red Spoon	19	Thanksgiving Pink	9	Yellow Cushion	17
Reverend Horace Bushnell ..	12	The Belle	16	Yellow Daisy	15
Richard Mandel	20	The Dean	10	Yellow December Glory	8
Richmond	7	The Moor	18	Yellow Dot	11
Rising Sun	14	The Titan	17	Yellow Doty	11
R. M. Hatton	17	The Urchin	19	Yellow Fellow	11-20
R. M. Calkins	8	Thorina	21	Yellow Frost	7
Roberta Copeland	18	Thomas W. Pockett	10	Yellow Garza Supreme	16
Robin Hood	14	Thyra	14-21	Yellow Gem	17
Rodell, Improved	11-20	Tobin's Late Yellow	8	Yellow Godfrey	15
Rolinda	16-21	Tokyo	12	Yellow Irene	11
Roman Bronze	13	Tom Browne	8	Yellow Izola	20
Romany	18	Tom Pearson	12	Yellow Mefo	7
Rosabella	9	Tonquin	14	Yellow Monument	7
Rose Charm	14	Topknot	16	Yellow New York	11
Rose Chochard	9-21	Tuxedo	17	Yellow Normandie (See	
Rose Glory	9	U		Barbara Cummings)	17
Rose Glow	19	Unalga (See Gold Coin)	12	Yellow Pockett	10
Roselea	14	Unique	11	Yellow Princeton	12
Rose Marie	9	Usona	14	Yellow Rolinda	16-20
Rose Pearl	13	Uvalda	12	Yellow Sea Gull	11
Rose Perfection	9	V		Yellow Silver Star	12
Rosy Gem	19	Valencia	15	Yellow Spoon	17
Rowenna	13	Venus	19	Yellow Supreme	16
Royal Crimson	14	Vera Victoria (See Mary L.		Yellow Taggart	10
Royal Queen	12	Hall)	11	Yellow Turner	10
Ruth Cummings	19	Vermont	10	Yellow Yuletide	12
Ruth Hatton	18	Viking	15	Yolanda	16
S		Vivid	19	Yomei	11
Saladin	19	Vulcan	18	Yuvawn	12

Large Flowering Commercial Varieties

In this catalog are two duplications of names as follows:

December Glory—A large mum.

December Glory—A pompon.

Innocence—A hardy Korean pompon.

Smith's Innocence—A white anemone.

When either of these varieties are ordered, kindly specify clearly which is intended.

NOTE

When variety **Gladys Pearson** is ordered, original stock will be shipped.

When **Dark Bronze Gladys Pearson** is requested, Oak Leaf will be shipped.

Under Hardy Chrysanthemums we have listed variety
"Amelia." This is identical with variety "Pink Cushion."

X—Extra good or generally accepted best varieties.

S—Indicates varieties we find most suitable for shading.

P—Indicates varieties suitable for Pot Plants.

*****—Indicates it will be impossible for us to make delivery before May 1st.

NOTE CAREFULLY INSTRUCTIONS FOR ORDERING ON PAGE TWO

YELLOW

	Name and Description	Height	Select Bud	Matures	Price per	
					100	1000
	Yellow Frost. Yellow	Short	Early	Early	\$3.00	\$27.50
	Golden Glow. Pale golden yellow. Incurred....	Med.	Aug. 1	Oct. 1	3.00	27.50
P	Gold Lode. Golden yellow.....	Med.	Aug. 25	Oct. 1	3.00	27.50
*	Golden October. Rich golden yellow. Semi-in-curved	Med.	Aug. 25	Oct. 10	3.00	27.50
X	William Didden. Yellow. Sport from Indianola....	Med.	Aug. 25	Oct. 10	3.00	27.50
XP	Celestra. Bright yellow	Med.	Ter. Bud	Oct. 15	3.00	27.50
	Comet. Deep lemon yellow. Incurred.....	Med.	Ter. Bud	Oct. 15	12.00	100.00
	Chrysolora. Large incurved light yellow.....	Med.	Aug. 15	Oct. 15	3.00	27.50
XSP	Mrs. H. E. Kidder. Bright yellow.....	Med.	Aug. 25	Oct. 20	3.00	27.50
X	Yellow Ambassador. Yellow. Sport from Ambassador	Med.	Ter. Bud	Oct. 25	3.00	27.50
SP	Golden Wave. Yellow	Short	Sept. 5	Oct. 25	3.00	27.50
X	Blazing Gold. Golden yellow.....	Med.	Ter. Bud	Oct. 25	6.00	50.00
	Corona. Deep yellow.....	Tall	Ter. Bud	Oct. 25	3.00	27.50
P	Smith's Superlative. Golden yellow.....	Med.	Aug. 25	Oct. 25	3.00	27.50
XSP	Sunglow. Yellow	Med.	Aug. 25	Oct. 25	3.00	27.50
	Citronella. Light yellow.....	Short	Aug. 31	Oct. 28	3.00	27.50
XSP	Golden Glory. Golden yellow.....	Short	Aug. 25	Nov. 1	3.00	27.50
	Richmond. Yellow	Med.	Aug. 25	Nov. 1	3.00	27.50
	Col. F. M. Alger. Pernet yellow.....	Med.	Sept. 5	Nov. 1	4.00	35.00
XS	Good News. Yellow. Sport from Detroit News. Excellent	Med.	Aug. 30	Nov. 1	3.00	27.50
XP	Cardonia. Deep rich yellow.....	Med.	Sept. 5	Nov. 10	3.00	27.50
X	Whittier. Yellow	Med.	Sept. 15	Nov. 13	3.00	27.50
X	Yellow Monument. Yellow. Sport from Monument	Med.	Sept. 10	Nov. 15	3.00	27.50
	Columbus Dispatch. Deep yellow. Large bloom..	Med.	Sept. 1	Nov. 15	3.00	27.50
XP	Honey Dew. Yellow.....	Short	Ter. Bud	Nov. 15	3.00	27.50
	Jubilee. Clear Bonnaffon yellow.....	Short	Ter. Bud	Nov. 15	6.00	50.00
P	Secretary Nehrling. Buff yellow.....	Med.	Sept. 15	Nov. 18	3.00	27.50
	Golden Celebration. Light yellow.....	Med.	Sept. 15	Nov. 20	3.00	27.50
	Major Bonnaffon. Yellow.....	Short	Sept. 10	Nov. 20	3.00	27.50
X	Yellow Mefo. Yellow. Sport from Mefo.....	Med.	Sept. 20	Nov. 20	3.00	27.50
XP	Friendly Rival. Large golden yellow.....	Med.	Sept. 10	Nov. 20	3.00	27.50

Enclose Your Mum With Your Seed Order

Large Flowering Commercial Varieties (Continued)

	Name and Description	Height	Select Bud	Matures	Price per	
					100	1000
X	Friendly Call. Buff yellow.....	Tall	Ter. Bud	Nov. 20	3.00	27.50
X	Marie de Petris. Yellow.....	Short	Sept. 15	Nov. 23	3.00	27.50
XS	Golden Pearson. (Leroy Zang) Yellow. Sport from Gladys Pearson.....	Med.	Sept. 30	Nov. 25	3.00	27.50
XP	Sun Gold. Yellow.....	Med.	Sept. 30	Nov. 25	3.00	27.50
	Golden Chadwick. Yellow.....	Med.	Ter. Bud	Nov. 25	3.00	27.50
	Yellow Chattanooga. Light yellow.....	Med.	Sept. 20	Nov. 25	3.00	27.50
X	Improved Yellow Chattanooga. Light yellow.....	Med.	Sept. 20	Nov. 25	8.00	75.00
	Loretta. Intense yellow.....	Short	Aug. 30	Nov. 30	5.00	40.00
P	R. M. Calkins. Golden yellow.....	Med.	Sept. 20	Nov. 30	3.00	27.50
	Yellow December Glory. Light yellow.....	Tall	Sept. 30	Nov. 30	3.00	27.50
X	Golden Mrs. Ross. Golden yellow. (Improved Nellie T. Ross.).....	Tall	Ely Oct.	Dec. 3	3.00	27.50
X	Golden Mistletoe. Yellow.....	Med.	Sept. 30	Dec. 10	3.00	27.50
XP	Tobin's Late Yellow. Yellow. Sport from Smith's Late White	Short	Sept. 30	Dec. 15	3.00	27.50
X	Improved Tobin's Late Yellow. Deep yellow. Sport from Tobin's Late Yellow.....	Short	Sept. 30	Dec. 15	4.00	35.00

WHITE

	Early Frost. White.....	Short	Early	Early	3.00	27.50
	Smith's Early White. White.....	Tall	Aug. 10	Oct. 5	3.00	27.50
XP	Quaker Maid. White.....	Med.	Aug. 25	Oct. 15	3.00	27.50
	Oconto. White	Med.	Aug. 25	Oct. 15	3.00	27.50
XS	Camilla. White	Tall	Aug. 25	Oct. 18	3.00	27.50
XS	Silver Sheen. Standard early white.....	Med.	Aug. 30	Oct. 18	3.00	27.50
P	Christina. White. Sport from Rose Chocard.....	Short	Aug. 25	Oct. 20	3.00	27.50
P	White Chief. White.....	Med.	Ter. Bud	Oct. 20	3.00	27.50
XP	Ambassador. Large long stemmed white.....	Med.	Ter. Bud	Oct. 23	3.00	27.50
*	Albatross. Pure white.....	Med.	Ter. Bud	Nov. 1	6.00	50.00
XS	Snow White. White.....	Med.	Ter. Bud	Nov. 1	3.00	27.50
X	Stately White. White.....	Tall	Ter. Bud	Nov. 1	3.00	27.50
XS	Betsy Ross. Finely shaped white.....	Tall	Aug. 25	Nov. 1	3.00	27.50
XS	White Chieftain. White.....	Short	Aug. 30	Nov. 5	3.00	27.50
X	Chas. W. Johnson. A standard white.....	Med.	Sept. 10	Nov. 5	3.00	27.50
	Chas. Rager. White.....	Med.	Sept. 15	Nov. 10	3.00	27.50
X	Monument. White	Med.	Sept. 10	Nov. 15	3.00	27.50
P	Edgar Stillman Kelly. White.....	Med.	Sept. 15	Nov. 15	3.00	27.50
P	Favorite. White.....	Med.	Sept. 5	Nov. 15	3.00	27.50
XS	Marketeer. Finest late white.....	Med.	Ter. Bud	Nov. 18	3.00	27.50
X	Mefo. White	Med.	Sept. 20	Nov. 20	3.00	27.50
	Antartic. Incurved	Med.	Ter. Bud	Nov. 20	12.00	100.00
	Tom Browne. White.....	Med.	Ter. Bud	Nov. 20	3.00	27.50
	White Distinction. White.....	Med.	Ter. Bud	Nov. 25	3.00	27.50
P	White Frick. White. Sport from Helen Frick.....	Short	Sept. 10	Nov. 25	3.00	27.50
X	Chattanooga. White	Med.	Sept. 20	Nov. 25	3.00	27.50
X	White Chadwick. White.....	Med.	Ter. Bud	Nov. 25	3.00	27.50
	Miss Flora Bowers. White.....	Med.	Sept. 5	Nov. 30	5.00	40.00
X	December Glory. White.....	Tall	Sept. 30	Dec. 1	3.00	27.50
	December Beauty. White, tinged with pink.....	Med.	Oct. 1	Dec. 8	3.00	27.50
	Improved December Beauty. Pure white. Sport from December Beauty.....	Med.	Oct. 1	Dec. 8	4.00	35.00
X	White Mistletoe. White.....	Med.	Sept. 30	Dec. 10	3.00	27.50
XP	Smith's Late White. White.....	Short	Sept. 30	Dec. 15	3.00	27.50

BRONZE

P	Bronze Lode. Light bronze. Sport from Gold Lode	Med.	Aug. 25	Oct. 1	3.00	27.50
XS	Indianola. Light bronze.....	Med.	Aug. 25	Oct. 10	3.00	27.50

Poor Varieties Cost Exactly As Much To Grow As Good Ones

Large Flowering Commercial Varieties (Continued)

	Name and Description	Height	Select Bud	Matures	Price per	
					100	1000
SP	Hilda Bergen. Bronze.....	Med.	Aug. 25	Oct. 25	3.00	27.50
	Keystone. Bronze	Med.	Aug. 30	Oct. 25	3.00	27.50
XP*	Glitters. Bright bronze.....	Med.	Ter. Bud	Oct. 28	3.00	27.50
XP	Apricot Queen. Orange bronze.....	Short	Sept. 5	Nov. 1	3.00	27.50
XS	Detroit News. Finest early bronze.....	Med.	Aug. 30	Nov. 1	3.00	27.50
X	Anna Kaskas. Golden bronze.....	Tall	Sept. 5	Nov. 5	3.00	27.50
X	Indianapolis Bronze. Buff bronze suffused with pink. Incurved	Med.	Ter. Bud	Nov. 8	12.00	100.00
*	Indian Chief. Deep reddish bronze; golden buff reverse	Med.	Sept. 5	Nov. 10	3.00	27.50
	Mrs. A. J. Stahelin. Bronze with reverse petals, yellow	Med.	Ter. Bud	Nov. 15	3.00	27.50
	Golden Oak. Golden bronze.....	Med.	Ter. Bud	Nov. 18	3.00	27.50
	Gladys Pearson. Good light bronze.....	Med.	Sept. 30	Nov. 25	3.00	27.50
X	Oak Leaf. Dark bronze.....	Med.	Sept. 30	Nov. 25	3.00	27.50
XP	Bronze Frick. Bronze. Sport from Helen Frick....	Short	Sept. 10	Nov. 25	3.00	27.50
	Bronze Chadwick. Bronze.....	Med.	Ter. Bud	Nov. 25	3.00	27.50
X	Bronze Mistletoe. Bronze.....	Med.	Sept. 30	Dec. 10	3.00	27.50

PINK

	Rose Marie. Pink.....	Tall	Aug. 5	Oct. 1	3.00	27.50
	Lustre. Pink	Short	Aug. 25	Oct. 10	3.00	27.50
XS	Pink Chief. Pink.....	Tall	Ter. Bud	Oct. 15	3.00	27.50
SP	Justrite. Pink	Short	Ter. Bud	Oct. 15	3.00	27.50
XS	Rose Glory. Pink.....	Med.	Ter. Bud	Oct. 20	3.00	27.50
	Major Ed. Bowes. Pink. Medium length stem.....	Med.	Aug. 30	Oct. 20	3.00	27.50
X	October Rose. Pink.....	Med.	Sept. 5	Oct. 20	3.00	27.50
P	Rose Chocard. Pink.....	Short	Aug. 15	Oct. 20	3.00	27.50
	Rosabella. Rose pink. Incurved.....	Med.	Ter. Bud	Oct. 25	12.00	100.00
	Pink Delight. Rose pink.....	Tall	Sept. 10	Nov. 1	3.00	27.50
	Old Rose. Pink.....	Med.	Sept. 10	Nov. 1	3.00	27.50
XP	J. W. Prince. (Improved Chieftain) Light pink.	Short	Aug. 30	Nov. 5	3.00	27.50
X	Indianapolis Pink. Excellent light lavender. Darker reverse	Med.	Ter. Bud	Nov. 8	3.00	27.50
P	Floyd Gibbons. Salmon pink with buff reverse....	Short	Sept. 15	Nov. 10	3.00	27.50
	Rose Perfection. Pink.....	Short	Sept. 10	Nov. 10	3.00	27.50
	Pink Treasure. Pink.....	Short	Sept. 20	Nov. 10	3.00	27.50
*	Orchid Queen. Orchid pink.....	Med.	Ter. Bud	Nov. 10	3.00	27.50
X	Dr. Enguehard. Rose pink.....	Med.	Sept. 5	Nov. 20	3.00	27.50
XP	Peter John. Light pink. Sport from Thanksgiving Pink	Short	Sept. 15	Nov. 23	3.00	27.50
P	Thanksgiving Pink. Dark pink.....	Short	Sept. 15	Nov. 23	3.00	27.50
	Distinction. Pink	Med.	Ter. Bud	Nov. 25	3.00	27.50
XP	Helen Frick. Pink	Med.	Sept. 10	Nov. 25	3.00	27.50
	Pink Chadwick. Pink.....	Med.	Ter. Bud	Nov. 25	3.00	27.50
*	Edwin Seidewitz. Bright pink.....	Tall	Sept. 15	Nov. 30	3.00	27.50
X	Pink Mistletoe. Pink.....	Med.	Sept. 30	Dec. 10	3.00	27.50

RED

	Governor Green. Crimson with old gold reverse..	Short	Aug. 15	Oct. 15	3.00	27.50
X	Mrs. David F. Roy. Crimson with bronze reverse; Excellent	Short	Sept. 15	Nov. 8	3.00	27.50
XP	Garnet King. Deep, bright red.....	Med.	Sept. 20	Nov. 18	3.00	27.50
P	Harvard. Crimson	Med.	Sept. 30	Nov. 30	3.00	27.50
X	Mohawk Chief. Crimson.....	Med.	Oct. 1	Nov. 30	3.00	27.50

New Varieties Are Increasing The Value Of Mums Annually

Exhibition Varieties

NOTE CAREFULLY INSTRUCTIONS FOR ORDERING ON PAGE TWO

YELLOW

Name and Description	Height	Select Bud	Matures	Price per	
				100	1000
Harvest Moon. Bright yellow.....	Short	Ter. Bud	Oct. 25	\$5.00	per doz.
X Golden Majestic. Bright yellow.....	Short	Aug. 20	Nov. 1	8.00	75.00
J. R. Booth. Yellow.....	Med.	Aug. 15	Nov. 1	8.00	75.00
X Yellow Turner. Yellow.....	Med.	Aug. 25	Nov. 5	6.00	50.00
X Yellow Pockett. Yellow.....	Med.	Aug. 15	Nov. 8	8.00	75.00

WHITE

Alice Benson. White.....	Med.	Aug. 30	Nov. 1	8.00	75.00
X William Turner. White.....	Med.	Aug. 25	Nov. 5	6.00	50.00
X Louisa Pockett. White.....	Med.	Aug. 15	Nov. 8	8.00	75.00

BRONZE

X Majestic. Clear, shiny amber bronze.....	Short	Aug. 20	Nov. 1	8.00	75.00
X Mrs. H. S. Firestone. Chamois buff.....	Short	Aug. 25	Nov. 1	8.00	75.00
X Marian H. Uffinger. Bronzy crimson with a gold reverse	Med.	Aug. 20	Nov. 1	8.00	75.00
Nagirroc. Golden bronze.....	Med.	Aug. 15	Nov. 1	8.00	75.00
X Bronze Turner. Light bronze.....	Med.	Aug. 25	Nov. 5	6.00	50.00
W. H. Waite. Bronze.....	Short	Aug. 15	Nov. 5	6.00	50.00

PINK

La France. Purple.....	Med.	Aug. 15	Nov. 1	6.00	50.00
X Dr. J. M. Inglis. Wine purple amaranth with silver reverse	Tall	Aug. 25	Nov. 1	8.00	75.00
X Pink Turner. (Mrs. Leslie Davis) Pink.....	Med.	Aug. 25	Nov. 5	6.00	50.00
X Thos. W. Pockett. Pink.....	Med.	Aug. 15	Nov. 8	8.00	75.00
X Vermont. Pink	Tall	Aug. 25	Nov. 8	8.00	75.00

RED

X Grace Sturgis. Wine red with pinkish-silver reverse	Tall	Aug. 25	Nov. 1	6.00	50.00
X Red Majestic. Bronzy red.....	Short	Aug. 25	Nov. 1	8.00	75.00
Mrs. G. G. Mason. Blood red with golden reverse	Med.	Aug. 20	Nov. 1	8.00	75.00
X Improved W. H. Waite. Red.....	Short	Aug. 15	Nov. 5	6.00	50.00
Mrs. Jules Leeds. Blood red.....	Short	Aug. 25	Nov. 8	8.00	75.00

Odd Formed--Feathery and Threadlike--Varieties

NOTE CAREFULLY INSTRUCTIONS FOR ORDERING ON PAGE TWO

Name and Description	Height	Select Bud	Matures	Price per	
				100	1000
White Sensation. White.....	Med.	Ter. Bud	Nov. 1	\$8.00	\$75.00
Kimie. Golden bronze.....	Med.	Ter. Bud	Nov. 1	8.00	75.00
Marie Tashima. White.....	Tall	Ter. Bud	Nov. 1	8.00	75.00
Golden Pride. Golden yellow.....	Short	Ter. Bud	Nov. 1	8.00	75.00
Yamabuki. Yellow	Med.	Ter. Bud	Nov. 1	8.00	75.00
Sam Caswell. Light rose pink.....	Med.	Ter. Bud	Nov. 1	6.00	50.00
X Yellow Taggart. Yellow quilled petals covered with hair	Med.	Ter. Bud	Nov. 1	6.00	50.00
X Ohkwan. Yellow	Med.	Ter. Bud	Nov. 1	6.00	50.00
The Dean. White.....	Med.	Ter. Bud	Nov. 1	6.00	50.00
June Arnold. White with cream center.....	Short	Ter. Bud	Nov. 5	8.00	75.00
Bess Witt. Bronze. (Sport from Peggy Ann Hoover)	Short	Ter. Bud	Nov. 5	8.00	75.00
X Patricia Grace. (Rayonnante) Shell pink.....	Med.	Ter. Bud	Nov. 5	6.00	50.00

A Few Exhibition Varieties Well Grown Is An Attraction

Odd Formed--Feathery and Threadlike--Varieties (Continued)

	Name and Description	Height	Select Bud	Matures	Price per	
					100	1000
	Butterfly. Yellow	Tall	Ter. Bud	Nov. 5	8.00	75.00
X	Peggy Ann Hoover. Quilled lavender.....	Short	Ter. Bud	Nov. 5	6.00	50.00
X	Miss Gena Harwood. Rosy mauve.....	Med.	Ter. Bud	Nov. 5	6.00	50.00
	Benten. Bronze and deep red tips, with green center	Med.	Ter. Bud	Nov. 10	6.00	50.00
	Silver Drops. White	Short	Ter. Bud	Nov. 10	8.00	75.00
X	Yomei. Golden tube petals with red spoon-end tips	Med.	Ter. Bud	Nov. 10	6.00	50.00
X	Pride of Tokyo. Creamy pink. A novelty with odd tubular petals	Tall	Ter. Bud	Nov. 10	6.00	50.00
	Japanese Maiden. Yellow.....	Med.	Ter. Bud	Nov. 25	6.00	50.00
X	Unique. Rich wine red.....	Tall	Ter. Bud	Dec. 1	6.00	50.00

Pompons & Decorative Commercial Varieties

The term Pompon is applied to those varieties which are of the true rounded type, and those very nearly approaching this type.

Decorative varieties are those which are a distinct departure from the rounded type. Their flowers are less compact, partly reflexed and display more of the color of the inner side of the petals.

Size of flower is indicated by S—small; Int.—intermediate; L—large.

X—Extra good or generally accepted best varieties.

S—Indicates varieties we find most suitable for shading.

P—Indicates varieties suitable for Pot Plants.

D—Indicates smaller flowered varieties most suitable for growing as disbudded pompons.

*****—Indicates it will be impossible to make delivery before May 1st.

NOTE CAREFULLY INSTRUCTIONS FOR ORDERING ON PAGE TWO

YELLOW

	Name and Description	Height	Type	Matures	Price per	
					100	1000
	Ida Improved. Yellow.....	Med.	Int. Pomp.	Oct. 15	\$3.00	\$27.50
	Yellow Irene. Light lemon yellow. Sport from Irene	Short	S. Pomp.	Oct. 18	4.00	35.00
XSP	Rodell Improved. Yellow. Sport from Rodell; Excellent	Short	Int. Pomp.	Oct. 20	3.00	27.50
D	Masaka. Yellow	Med.	L. Pomp.	Oct. 20	3.00	27.50
XS	Gold Finch. Yellow.....	Med.	Int. Pomp.	Oct. 20	3.00	27.50
XS	Golden Spray. Yellow.....	Med.	Int. Pomp.	Oct. 23	3.00	27.50
D	Golden Fairy. Yellow.....	Med.	L. Pomp.	Oct. 23	3.00	27.50
XPD	Golden Herald. Large extra deep golden yellow..	Med.	L. Dec.	Oct. 25	3.00	27.50
	Cora Peck Buhl. Yellow.....	Tall	Int. Pomp.	Oct. 25	3.00	27.50
XS	Yellow Dot. (Jablonsky.) Yellow; reddish center	Med.	Int. Pomp.	Oct. 25	3.00	27.50
XSD	Mary Lennon Hall. Clear rich yellow.....	Tall	Int. Pomp.	Nov. 1	3.00	27.50
	Gold Drop. Old gold.....	Med.	Int. Pomp.	Nov. 1	3.00	27.50
XD	Yellow Sea Gull. Yellow. Sport from Sea Gull.....	Tall	Int. Pomp.	Nov. 1	3.00	27.50
D	Yellow Doty. Yellow.....	Med.	L. Pomp.	Nov. 1	3.00	27.50
XSP	Nuggets. Best early yellow.....	Short	S. Pomp.	Nov. 5	3.00	27.50
X	Derigold. Lemon yellow.....	Med.	Int. Pomp.	Nov. 10	3.00	27.50
XS	Yellow New York. Yellow.....	Med.	S. Pomp.	Nov. 13	3.00	27.50
X	Golden Splendor. Bright yellow.....	Med.	Int. Pomp.	Nov. 15	3.00	27.50
XSP	Yellow Fellow. Yellow.....	Med.	Int. Dec.	Nov. 15	3.00	27.50
XP	Lois. Golden yellow.....	Med.	S. Pomp.	Nov. 18	3.00	27.50

We Can't Accept Orders For Less Than 10 Of A Kind

Pompons & Decorative Commercial Varieties

YELLOW (Continued)

	Name and Description	Height	Type	Matures	Price per	
					100	1000
X	Tom Pearson. Deep yellow.....	Med.	Int. Pomp.	Nov. 18	3.00	27.50
	Yellow Princeton. Deep lemon yellow.....	Med.	Int. Dec.	Nov. 20	8.00	75.00
PD	Ball of Gold. Yellow.....	Med.	Int. Pomp.	Nov. 20	3.00	27.50
X	Big Baby. Yellow.....	Med.	S. Pomp.	Nov. 20	3.00	27.50
	Hasegawa Gold. Large golden yellow.....	Med.	Int. Pomp.	Nov. 23	3.00	27.50
X	Golden Sceptre. Yellow.....	Tall	Int. Pomp.	Nov. 25	3.00	27.50
	Long Island Sunshine. Bright yellow.....	Tall	Int. Pomp.	Nov. 28	3.00	27.50
P	Yellow Yuletide. Yellow.....	Short	Int. Pomp.	Nov. 28	3.00	27.50
X	Christmas Gold. Bright yellow.....	Med.	S. Pomp.	Nov. 28	3.00	27.50
	Canary. Pale lemon yellow.....	Med.	Int. Pomp.	Nov. 28	12.00	100.00
X	Yellow Cordova. Yellow. Sport from Cordova.....	Med.	Int. Dec.	Nov. 30	3.00	27.50
XD	Gold Coin. (Unalga) Yellow.....	Med.	Int. Pomp.	Dec. 1	3.00	27.50
XPD	Yuvawn. Yellow	Med.	Int. Pomp.	Dec. 3	3.00	27.50
X	Modena. Yellow	Med.	Int. Pomp.	Dec. 5	3.00	27.50
X	Golden Modena. Deep golden yellow. Sport from Modena	Med.	Int. Pomp.	Dec. 5	4.00	35.00
X	Tokyo. Yellow	Med.	S. Dec.	Dec. 10	3.00	27.50
X	Buttercup. Yellow	Tall	Int. Pomp.	Dec. 10	3.00	27.50
X*	Yellow Silver Star. Yellow. Sport from Silver Star	Tall	Int. Pomp.	Dec. 10	3.00	27.50
X	December Gold. Deep golden yellow.....	Med.	Int. Dec.	Dec. 15	8.00	75.00
X	Christmas Cheer. Deep yellow.....	Med.	Int. Pomp.	Dec. 15	3.00	27.50

WHITE

	Earliwhite. White	Med.	Int. Pomp.	Oct. 10	3.00	27.50
	Uvalda. Creamy white	Med.	Int. Pomp.	Oct. 10	3.00	27.50
XSP	White Jewell. White suffused with pink.....	Short	S. Pomp.	Oct. 15	3.00	27.50
SD	Silver Ball. White.....	Med.	L. Pomp.	Oct. 15	3.00	27.50
	Snow Cloud. White.....	Med.	Int. Pomp.	Oct. 15	3.00	27.50
XSP	Irene. White	Short	S. Pomp.	Oct. 18	3.00	27.50
	Greta. White	Med.	Int. Pomp.	Oct. 20	3.00	27.50
XS	Minong. White	Med.	S. Pomp.	Oct. 20	3.00	27.50
P	Silver Bells. White.....	Med.	S. Pomp.	Oct. 23	3.00	27.50
XS	Arcadia. Finest pure white.....	Med.	Int. Pomp.	Oct. 28	3.00	27.50
	White Pearl. White suffused with pink. Sport from Rose Pearl.....	Med.	Int. Pomp.	Oct. 28	12.00	100.00
XSD	Sea Gull. White.....	Tall	Int. Pomp.	Nov. 1	3.00	27.50
D	Marianna. White	Med.	L. Pomp.	Nov. 1	3.00	27.50
X	Dainty Maid. White, tinged with pink.....	Med.	S. Pomp.	Nov. 1	3.00	27.50
XP	Mary Pickford. White.....	Short	S. Pomp.	Nov. 1	3.00	27.50
XSD	White Doty. White.....	Med.	L. Pomp.	Nov. 1	3.00	27.50
XSD	Elora. Pearly white.....	Tall	L. Pomp.	Nov. 1	3.00	27.50
XS	Rev. Horace Bushnell. White.....	Tall	Int. Pomp.	Nov. 8	3.00	27.50
X	Crystal Jewell. White.....	Tall	S. Pomp.	Nov. 8	3.00	27.50
D	Crystal White. White.....	Tall	Int. Pomp.	Nov. 10	3.00	27.50
	Penguin. White	Med.	S. Pomp.	Nov. 10	3.00	27.50
X	Chicago Pearl. Finest clear white.....	Med.	Int. Pomp.	Nov. 15	3.00	27.50
	Bobbie. Large creamy white.....	Med.	S. Pomp.	Nov. 18	3.00	27.50
	Pearl. White	Tall	Int. Pomp.	Nov. 20	8.00	75.00
XP	White Yuletide. White.....	Short	Int. Pomp.	Nov. 28	3.00	27.50
X	Cordova. White	Med.	Int. Dec.	Nov. 30	3.00	27.50
	Royal Queen. White.....	Med.	Int. Pomp.	Dec. 5	3.00	27.50
	White Tonquin. Pure white. Sport from Tonquin	Med.	Int. Pomp.	Dec. 10	5.00	40.00
X*	Silver Star. White.....	Tall	Int. Pomp.	Dec. 10	3.00	27.50
X	December Glory. (Pompon) White.....	Med.	Int. Dec.	Dec. 15	3.00	27.50
	Bridal Bells. White.....	Med.	Int. Dec.	Dec. 15	3.00	27.50
X	Snow. Ivory white.....	Med.	Int. Pomp.	Dec. 30	8.00	75.00

If Your Express Differs From Your Post Office, Tell Us

Pompons & Decorative Commercial Varieties (Continued)

BRONZE

	Name and Description	Height	Type	Matures	Price per	
					100	1000
	Clara Jameson. Dark reddish bronze.....	Med.	S. Pomp.	Oct. 15	3.00	27.50
	Nubian. Bronzy red	Tall	Int. Pomp.	Oct. 15	3.00	27.50
XP	Bonibell. Orange buff.....	Short	S. Pomp.	Oct. 15	3.00	27.50
D	Tango. Reddish bronze	Med.	L. Pomp.	Oct. 15	7.00	65.00
	Carlina Lee. Reddish bronze.....	Med.	Int. Dec.	Oct. 20	3.00	27.50
XS	Roman Bronze. Bronze. Sport from Capt. Cook	Tall	Int. Pomp.	Oct. 20	3.00	27.50
P	Suntan. Bronze	Med.	Int. Pomp.	Oct. 20	3.00	27.50
X	Adelaide. Mahogany	Med.	S. Pomp.	Oct. 23	3.00	27.50
XS	Jemima. Bronze	Med.	Int. Pomp.	Oct. 23	3.00	27.50
S*	Bronze Queen. Dark bronze.....	Tall	S. Pomp.	Oct. 25	3.00	27.50
P	Ethel. Bronze	Med.	S. Pomp.	Oct. 25	3.00	27.50
	Joan Wells. Bronze. Sport from Pink Dot.....	Med.	Int. Pomp.	Oct. 25	3.00	27.50
XS	Fire Bird. Red bronze.....	Med.	Int. Dec.	Oct. 25	3.00	27.50
	Bronze Doty. Bronze.....	Med.	Int. Pomp.	Nov. 1	3.00	27.50
S	Source D'Or. Bronze.....	Med.	Int. Dec.	Nov. 1	3.00	27.50
X	Elizabeth Peterson. Orange bronze.....	Med.	Int. Dec.	Nov. 3	3.00	27.50
XD*	Edith Newberry. Orange rust.....	Tall	L. Dec.	Nov. 5	3.00	27.50
X	Peggy Poesch. Brilliant apricot.....	Med.	L. Dec.	Nov. 10	4.00	35.00
D	Muskoka. Bronze	Tall	L. Pomp.	Nov. 10	3.00	27.50
	Pirate Gold. Rich golden bronze.....	Med.	Int. Pomp.	Nov. 10	6.00	50.00
XS	New York. Bronze.....	Med.	S. Pomp.	Nov. 13	3.00	27.50
XS	Fez. Deep bronze.....	Med.	S. Pomp.	Nov. 15	3.00	27.50
XSP	Princeton. Golden yellow suffused with orange..	Med.	Int. Dec.	Nov. 15	3.00	27.50
XP*	November Bronze. Orange bronze.....	Med.	Int. Pomp.	Nov. 18	3.00	27.50
	Catherine. Bronze	Med.	Int. Dec.	Nov. 20	3.00	27.50
X	Legal Tender. Bronze and gold.....	Med.	Int. Dec.	Nov. 20	3.00	27.50
X	Bronze Beauty. Bronze.....	Med.	Int. Pomp.	Nov. 25	3.00	27.50
	Betty Watkins. Bronzy yellow.....	Med.	Int. Pomp.	Nov. 25	3.00	27.50
D	Capt. Blood. Dark reddish bronze.....	Med.	L. Dec.	Nov. 25	3.00	27.50
*	Dorothy Turner. Bronze.....	Med.	Int. Pomp.	Nov. 25	3.00	27.50
	Dusky Maid. Rich red and gold.....	Tall	Int. Pomp.	Nov. 25	6.00	50.00
P	Governor Lake. Reddish bronze.....	Short	Int. Pomp.	Nov. 25	3.00	27.50
P	Mrs. Beu. Standard bronze.....	Short	Int. Dec.	Nov. 25	3.00	27.50
P	Red Beu. Reddish bronze.....	Short	Int. Dec.	Nov. 25	3.00	27.50
X*	Bristolite. Bronze	Med.	Int. Pomp.	Nov. 25	3.00	27.50
X	Gold Tips. Bronze and gold.....	Med.	Int. Dec.	Nov. 25	3.00	27.50
	Rowenna. Bronze	Tall	Int. Pomp.	Nov. 25	3.00	27.50
X	Glow. Orange. Reddish orange at center.....	Med.	Int. Pomp.	Nov. 30	3.00	27.50
X	Avalon. Orange bronze.....	Med.	Int. Dec.	Dec. 1	3.00	27.50
	Loris. Bronze	Med.	Int. Dec.	Dec. 1	3.00	27.50
	Wildfire. Orange rust.....	Med.	Int. Dec.	Dec. 3	3.00	27.50
	Harmony. Red orange, with soft bronze shading	Med.	Int. Pomp.	Dec. 3	4.00	35.00
	Golden Nymph. Bronze, with reverse of petals					
	gold	Med.	S. Pomp.	Dec. 10	3.00	27.50
	Katherine Johnston. Orange.....	Med.	Int. Pomp.	Dec. 10	5.00	40.00
	Cavalcade. Mandarin red. Golden bronze reverse	Med.	Int. Pomp.	Dec. 10	4.00	35.00

PINK

XSP	Jewell. Bright rose pink.....	Short	S. Pomp.	Oct. 15	3.00	27.50
P	Dark Pink Jewell. Dark pink. Sport from Jewell..	Short	S. Pomp.	Oct. 15	3.00	27.50
	Leileh. Rose pink.....	Med.	Int. Dec.	Oct. 15	3.00	27.50
	Bonnie Maid. Pink.....	Med.	Int. Pomp.	Oct. 20	3.00	27.50
	Pink Pearl. Pink.....	Med.	S. Pomp.	Oct. 20	4.00	35.00
XS	Capt. Cook. Pink	Tall	Int. Pomp.	Oct. 20	3.00	27.50
P	Persian Rose. Rose pink.....	Short	Int. Pomp.	Oct. 23	3.00	27.50
	Rose Pearl. Lavender.....	Med.	Int. Pomp.	Oct. 23	12.00	100.00
X	Jessie. (Madeline) Deep rose pink. Excellent....	Med.	Int. Pomp.	Oct. 25	3.00	27.50

Some Of The Latest Anemones Are Highly Attractive

Pompons & Decorative Commercial Varieties (Continued)

PINK

	Name and Description	Height	Type	Matures	Price per	
					100	1000
PD	Angello. Light pink.....	Short	L. Pomp.	Oct. 25	3.00	27.50
D	Nellie Kleris. Lavender pink.....	Tall	L. Pomp.	Oct. 25	3.00	27.50
XS	Pink Dot. White, with pink center. Very excel- lent	Med.	Int. Pomp.	Oct. 25	3.00	27.50
	Highlights. Pale lavender with deep lavender center	Med.	Int. Pomp.	Oct. 25	3.00	27.50
	Ermalinda. Old rose.....	Med.	S. Pomp.	Oct. 25	3.00	27.50
	Rising Sun. Pink.....	Med.	Int. Pomp.	Oct. 28	4.00	35.00
S	Bright Spot. Shell pink. Bright center.....	Med.	S. Pomp.	Nov. 1	3.00	27.50
XD	Irene Rich. Pink.....	Med.	L. Pomp.	Nov. 1	3.00	27.50
XD	Lillian Doty. Shell pink.....	Med.	L. Pomp.	Nov. 1	3.00	27.50
	D Rose Charm. Rose pink.....	Med.	L. Pomp.	Nov. 1	3.00	27.50
XS	Mrs. Morgan G. Bulkeley. Light pink.....	Tall	Int. Pomp.	Nov. 8	3.00	27.50
XPD	Thyra. Dark pink.....	Med.	L. Pomp.	Nov. 10	3.00	27.50
XS	Silver Tips. Bright pink with silver tips.....	Med.	Int. Pomp.	Nov. 13	3.00	27.50
XP	Alice. Pink	Med.	Int. Dec.	Nov. 15	3.00	27.50
XD	Masterpiece. Tourmaline pink.....	Med.	Int. Pomp.	Nov. 15	3.00	27.50
	Dorothy Nehrling. Deep rose pink.....	Med.	S. Pomp.	Nov. 15	3.00	27.50
	Western Beauty. Pink.....	Short	Int. Dec.	Nov. 20	3.00	27.50
	Bobette. Pink with bronze center.....	Med.	S. Pomp.	Nov. 25	10.00	90.00
X	Usona. Pink	Med.	Int. Pomp.	Nov. 25	3.00	27.50
X	Olivia. Pink	Med.	Int. Pomp.	Dec. 1	3.00	27.50
X	Roselea. Pink	Med.	Int. Pomp.	Dec. 1	3.00	27.50
X	Pagosa. Dark pink	Med.	Int. Pomp.	Dec. 5	3.00	27.50
	Amaranthea. Purplish crimson.....	Med.	Int. Pomp.	Dec. 10	5.00	40.00
	Tonquin. Rose color.....	Med.	Int. Pomp.	Dec. 10	3.00	27.50
	Prosperity. Deep lavender.....	Med.	Int. Dec.	Dec. 10	8.00	75.00
	Mother of Pearl. Light rose pink.....	Tall	Int. Pomp.	Dec. 30	7.00	65.00

RED

X	Natoma. Flame scarlet.....	Short	Int. Dec.	Oct. 25	8.00	75.00
D	Fire Ball. Bright crimson.....	Tall	L. Pomp.	Nov. 1	3.00	27.50
D	Red Doty. Red.....	Tall	L. Pomp.	Nov. 1	3.00	27.50
XS	Robin Hood. Rich deep red.....	Med.	S. Pomp.	Nov. 5	3.00	27.50
XP	Patsy Dowd. Red.....	Short	S. Pomp.	Nov. 5	3.00	27.50
	Grenadier. Red	Med.	Int. Pomp.	Nov. 10	3.00	27.50
X	Mrs. Mary Hooker. Red.....	Tall	L. Dec.	Nov. 15	3.00	27.50
X	Red Princeton. Reddish bronze.....	Med.	Int. Dec.	Nov. 15	4.00	35.00
X	Campfire. Red	Tall	Int. Dec.	Nov. 20	3.00	27.50
	Helen Hubbard. Red.....	Med.	L. Dec.	Nov. 25	3.00	27.50
X	Royal Crimson. Intensely rich crimson.....	Med.	L. Dec.	Dec. 1	4.00	35.00

Don't Order Varieties Not Listed In This Catalog. It Covers "All The Best"

Single--Daisy Type--Varieties

X—Extra good or generally accepted best varieties.
 S—Indicates varieties we find most suitable for shading.
 P—Indicates varieties suitable for Pot Plants.
 D—Indicates smaller flowered varieties most suitable for growing as disbudded pompons.
 *—Indicates it will be impossible to make delivery before May 1st.

NOTE CAREFULLY INSTRUCTIONS FOR ORDERING ON PAGE TWO

YELLOW

Name and Description	Height	Size	Matures	Price per	
				100	1000
X Yellow Daisy. Deep lemon yellow.....	Med.	Intermed.	Oct. 25	\$4.00	\$35.00
XS* Gretchen Piper. Yellow.....	Med.	Intermed.	Nov. 1	3.00	27.50
X Golden Mensa. Yellow.....	Med.	Intermed.	Nov. 10	3.00	27.50
XD* Sonny Boy. Yellow.....	Med.	Intermed.	Nov. 15	3.00	27.50
Charter Oak. Yellow.....	Tall	Intermed.	Nov. 25	3.00	27.50
Yellow Godfrey. Yellow.....	Tall	Intermed.	Nov. 25	3.00	27.50
XD Jane. Yellow. Sport from Valencia.....	Tall	Large	Nov. 30	3.00	27.50
X Fawn. Deep buff yellow.....	Med.	Intermed.	Dec. 5	8.00	75.00

WHITE

Silver Emblem. Cream white.....	Med.	Intermed.	Nov. 1	8.00	75.00
X White Mensa. White.....	Med.	Intermed.	Nov. 10	3.00	27.50
Gladys Duckham. White.....	Med.	Intermed.	Nov. 20	3.00	27.50
White Godfrey. White.....	Tall	Intermed.	Nov. 25	3.00	27.50

BRONZE

X* Absolute. Scarlet bronze with yellow center.....	Med.	Intermed.	Nov. 1	3.00	27.50
X Aloma. Terra cotta bronze with yellow center..	Med.	Intermed.	Oct. 20	3.00	27.50
X Bronze Daisy. Light bronze.....	Med.	Intermed.	Oct. 25	4.00	35.00
XD Joan Piper. Amber bronze.....	Med.	Intermed.	Oct. 28	3.00	27.50
P Ida Skiff. Bronze.....	Short	Intermed.	Nov. 1	3.00	27.50
XP Bronze Buckingham. Bronze.....	Short	Intermed.	Nov. 3	3.00	27.50
XD Mason's Bronze. Burnt orange	Short	Large	Nov. 10	3.00	27.50
XSD Lighthouse. Bronze shading to watermelon red..	Med.	Intermed.	Nov. 10	3.00	27.50
XPD* Melba. Reddish bronze.....	Short	Large	Nov. 15	3.00	27.50
X Elizabeth McDowell. Bronze.....	Med.	Intermed.	Nov. 15	3.00	27.50
XP* Sunburst. Sunburst orange.....	Med.	Large	Nov. 25	3.00	27.50
Viking. Deep reddish bronze shading to orange..	Med.	Intermed.	Dec. 1	8.00	75.00
Dawn. (Hasegawa) Chestnut bronze.....	Tall	Intermed.	Dec. 5	3.00	27.50

PINK

XS October Pink. Pink.....	Med.	Intermed.	Oct. 25	4.00	35.00
XP W. H. Buckingham. Pink.....	Short	Intermed.	Nov. 3	3.00	27.50
P* Fairy Queen. Intense orchid pink.....	Short	Intermed.	Nov. 15	4.00	35.00
X Woburn. Pink	Tall	Intermed.	Nov. 15	3.00	27.50
X Hasegawa Pink. Pink with golden center.....	Med.	Intermed.	Nov. 25	3.00	27.50
Mrs. E. D. Godfrey. Light pink.....	Tall	Intermed.	Nov. 25	3.00	27.50
XD Valencia. Orchid pink.....	Tall	Large	Nov. 30	3.00	27.50
XD Dark Pink Valencia. Deep orchid pink.....	Tall	Large	Nov. 30	8.00	75.00

RED

D. Baker. Red.....	Short	Large	Oct. 20	3.00	27.50
X Red Daisy. Deep red.....	Med.	Intermed.	Oct. 25	4.00	35.00
Mrs. Darling. Red.....	Med.	Intermed.	Nov. 1	3.00	27.50
XD Red Rover. Crimson orange.....	Short	Large	Nov. 5	3.00	27.50
XP* Tagoya. Brilliant goya red.....	Short	Intermed.	Nov. 10	3.00	27.50
XD Clara Holford. Warm red.....	Med.	Large	Nov. 10	4.00	35.00
Radiant. Bright red.....	Med.	Intermed.	Nov. 10	3.00	27.50
XPD* Red Melba. Red.....	Short	Large	Nov. 15	3.00	27.50
X Hasegawa Poinsettia. Poinsettia red.....	Med.	Intermed.	Nov. 25	3.00	27.50
XPD Carnelia. Red	Short	Large	Nov. 30	3.00	27.50
Joe Beuerlein. Crimson red.....	Med.	Intermed.	Dec. 5	3.00	27.50
Blaze. Deep scarlet red.....	Tall	Intermed.	Dec. 10	8.00	75.00

Cold Houses, Described On Following Pages Make For Quality And Economy

Anemone Flowered Varieties

X—Extra good or generally accepted best varieties.

P—Indicates varieties suitable for Pot Plants.

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NOTE CAREFULLY INSTRUCTIONS FOR ORDERING ON PAGE TWO

YELLOW

	Name and Description	Height	Size	Matures	Price per	
					100	1000
XD	Yellow Blanche. Yellow. Sport from Blanche.....	Med.	Intermed.	Nov. 1	\$3.00	\$27.50
XD	Helios. Yellow	Med.	Large	Nov. 10	4.00	35.00
X	Sunray. Yellow	Med.	Intermed.	Nov. 15	3.00	27.50
	Faith Engel. Yellow, with golden yellow cushion..	Med.	Intermed.	Nov. 15	4.00	35.00
XD	Susanne Miller. Yellow. Sport from Norma.....	Tall	Large	Nov. 18	3.00	27.50
XPD	Yellow Rolinda. Deep golden yellow. Sport from Rolinda	Med.	Intermed.	Nov. 23	3.00	27.50
D	Maritza. Bright yellow with full highly rounded cushion	Short	Large	Nov. 25	3.00	27.50
PD	Sunshine. Yellow	Short	Intermed.	Nov. 25	3.00	27.50
XD	Citrus Queen. Lemon orange.....	Med.	Large	Nov. 25	3.00	27.50
XD	Gleam. Deep lemon yellow.....	Med.	Large	Dec. 5	8.00	75.00
XD	Yellow Supreme. Yellow. Sport from Pink Supreme	Med.	Large	Dec. 10	3.00	27.50
X	Yellow Garza Supreme. Yellow.....	Short	Intermed.	Dec. 15	3.00	27.50

WHITE

XPD	Graceland. Pure white, with yellow center.....	Med.	Intermed.	Oct. 28	3.00	27.50
XD	Blanche. White	Med.	Intermed.	Nov. 1	3.00	27.50
XD	White Anemone. White.....	Tall	Intermed.	Nov. 5	3.00	27.50
D	The Belle. Pure white.....	Med.	Intermed.	Nov. 5	3.00	27.50
XD	Smith's Innocence. White.....	Tall	Large	Nov. 5	3.00	27.50
X	Shasta. White	Med.	Intermed.	Nov. 8	12.00	100.00
XPD	Little America. Snow white; medium size.....	Med.	Intermed.	Nov. 10	3.00	27.50
D	Irene Hayes. White.....	Med.	Large	Nov. 15	8.00	75.00
XPD	White Norma. White.....	Tall	Large	Nov. 18	3.00	27.50
X	Early Garza Supreme. Finest white.....	Short	Intermed.	Nov. 25	3.00	27.50
D	Swan. White	Med.	Large	Dec. 1	8.00	75.00
XD	White Supreme. White suffused with pink.....	Med.	Large	Dec. 10	3.00	27.50
X	Garza Supreme. Standard white.....	Short	Intermed.	Dec. 15	3.00	27.50

BRONZE

D	Mrs. Chas. Wylie. Light reddish bronze.....	Med.	Large	Nov. 1	8.00	75.00
XD	Bronze Tuxedo. Bronze. Sport from Tuxedo.....	Med.	Large	Nov. 10	3.00	27.50
D	Cora Scovil. Burnt orange with low golden cushion	Med.	Large	Nov. 10	8.00	75.00
XD	Bronze Norma. Bronze. Sport from Norma.....	Tall	Large	Nov. 18	3.00	27.50
XD	Estrelita. Bronze thruout, with a full, regular cushion	Med.	Large	Nov. 20	3.00	27.50
XPD	Rolinda. Orange bronze.....	Med.	Intermed.	Nov. 23	3.00	27.50
XPD	Red Rolinda. Red. Sport from Rolinda.....	Med.	Intermed.	Nov. 23	3.00	27.50
	Yolanda. Yellow	Med.	Small	Nov. 25	3.00	27.50
XD	Coral Blaze. Orange bronze.....	Short	Large	Dec. 1	3.00	27.50
X	Chrome Emerald. Golden orange with gold cushion	Short	Intermed.	Dec. 1	3.00	27.50
XPD	Bronze Supreme. Bronze with pink cast.....	Med.	Large	Dec. 10	3.00	27.50

PINK

XD	Betty Rose. Pink, both petals and cushion.....	Med.	Large	Oct. 25	3.00	27.50
D	Marietta. Soft pink with very full cushion.....	Med.	Large	Oct. 30	3.00	27.50
D	Topknot. Creamy white cushion, pink petals....	Med.	Intermed.	Nov. 5	3.00	27.50

Most Gardeners Are Interested In Hardy Mums

Anemone Flowered Varieties

PINK (Continued)

	Name and Description	Height	Size	Matures	Price per	
					100	1000
	Linda Lou. Lavender.....	Med.	Intermed.	Nov. 8	12.00	100.00
D	Elsa Piel. Orchid pink, cushion tinged with gold	Med.	Large	Nov. 10	4.00	35.00
D	China Rose. Dragon's blood red.....	Med.	Large	Nov. 10	3.00	27.50
XD	Tuxedo. Pink	Med.	Large	Nov. 10	3.00	27.50
XP	Orchid Beauty. Orchid with golden cushion.....	Med.	Intermed.	Nov. 15	3.00	27.50
XPD	Freida. Pink; choice.....	Med.	Large	Nov. 15	3.00	27.50
XSD	Norma. Orchid pink petals with golden pink cushion	Tall	Intermed.	Nov. 18	3.00	27.50
XD	Dark Pink Norma. Dark pink.....	Tall	Intermed.	Nov. 18	3.00	27.50
PD	Long Island Beauty. White with large yellow cushion	Med.	Large	Nov. 20	3.00	27.50
XPD	Beautiful Lady. Bright pink petals with creamy white cushion	Short	Large	Nov. 25	3.00	27.50
XD	Dark Pink Supreme. Lavender. Sport from Pink Supreme	Med.	Large	Dec. 10	3.00	27.50

RED

D	Stoplight. Terra cotta petals with low yellow cushion	Med.	Intermed.	Nov. 5	3.00	27.50
XD	The Titan. Scarlet crimson with bronzy red cushion	Med.	Large	Nov. 10	3.00	27.50
D	Captivation. Mahogany red.....	Med.	Large	Nov. 10	3.00	27.50
XPD*	Crimson Glow. Crimson maroon.....	Med.	Intermed.	Nov. 25	3.00	27.50

Hardy Varieties

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NOTE CAREFULLY INSTRUCTIONS FOR ORDERING ON PAGE TWO

YELLOW

	Name and Description	Height	Type	Matures	Price per	
					100	1000
	Carrie. Yellow	Med.	Decor.	Early	\$3.00	\$27.50
	Yellow Cushion. Light buff yellow.....	Short	Semi-dble.	Sept.	3.00	27.50
X	Barbara Cummings. (Yellow Normandie). Yellow shading to bronze.....	Med.	Decor.	Sept.	3.00	27.50
X	Wolverine. Yellow	Med.	Decor.	Sept.	3.00	27.50
*	Pygmy Gold. Golden yellow.....	Short	Button	Sept. 5	4.00	35.00
X	Lorelei. Yellow	Med.	Decor.	Sept. 10	3.00	27.50
P	Early Yellow. Yellow. Sport from Early Bronze..	Short	Button	Sept. 15	3.00	27.50
	Algonquin. Golden yellow	Med.	Decor.	Sept. 20	3.00	27.50
*	King Midas. Yellow.....	Med.	Decor.	Sept. 30	3.00	27.50
*	Acacia. Pale lemon yellow.....	Med.	Semi-dble.	Sept. 30	8.00	75.00
X	R. Marion Hatton. Canary yellow.....	Med.	Decor.	Oct. 1	3.00	27.50
*	Mrs. Sam P. Rotan. Deep golden yellow.....	Med.	Decor.	Oct. 1	3.00	27.50
*	Gleam O'Gold. Pale lemon yellow.....	Short	Decor.	Oct. 1	8.00	75.00
	Barnegat. Pale lemon yellow.....	Short	Decor.	Oct. 1	3.00	27.50
*	Orion. Canary yellow.....	Med.	Single	Oct. 5	3.00	27.50
	Pale Moon. Pale lemon yellow.....	Med.	Semi-dble.	Oct. 5	8.00	75.00
P	Yellow Gem. Canary yellow.....	Med.	Button	Oct. 5	3.00	27.50
*	Ceres. Old gold.....	Med.	Single	Oct. 10	3.00	27.50
	Jack Bannister. Light yellow.....	Med.	Decor.	Oct. 10	3.00	27.50
XP	Judith Anderson. Yellow.....	Short	Button	Oct. 25	3.00	27.50
	Yellow Spoon. Lemon yellow.....	Med.	Spoon	Oct. 30	8.00	75.00

"Send Your Mum With Your Seed Order"

Hardy Varieties (Continued)

WHITE

	Name and Description	Height	Type	Matures	Price per	
					100	1000
	White Gull. White.....	Short	Button	Aug. 20	3.00	27.50
	*Innocence. White.....	Short	Single	Sept.	3.00	27.50
X	Jean Cummings. White.....	Med.	Decor.	Sept.	3.00	27.50
	White Cushion. (Queen Cushion).....	Short	Semi-dble.	Sept.	3.00	27.50
X	Normandie. White.....	Short	Decor.	Sept.	3.00	27.50
	September Queen. White.....	Short	Decor.	Sept.	3.00	27.50
	Tasiva. White.....	Med.	Decor.	Sept.	3.00	27.50
	Seminole. Cream white.....	Short	Decor.	Sept. 15	3.00	27.50
	Winnetka. White.....	Short	Decor.	Sept. 20	3.00	27.50
	*Niobe. White with light yellow disc.....	Med.	Semi-dble.	Oct. 5	3.00	27.50
	Margot. White.....	Short	Button	Oct. 8	3.00	27.50
	Ruth Hatton. Ivory white.....	Short	Decor.	Oct. 10	3.00	27.50
	Malinta. Cream white.....	Med.	Button	Oct. 10	5.00	40.00
	White Spoon. White.....	Med.	Spoon	Oct. 30	8.00	75.00

BRONZE

	*Geronimo. Buff orange.....	Med.	Decor.	Aug. 25	3.00	27.50
	Ann Miller. Orange red.....	Med.	Decor.	Aug. 25	3.00	27.50
	Bronze Cushion. (King Cushion). Buff bronze..	Short	Semi-dble.	Sept.	3.00	27.50
X	Aladdin. Bronze.....	Short	Decor.	Sept.	3.00	27.50
XP	Early Bronze. Bronze.....	Short	Button	Sept.	3.00	27.50
	Emmet. Buff bronze suffused with pink.....	Short	Single	Sept. 15	3.00	27.50
	Elena. Reddish bronze.....	Short	Decor.	Sept. 20	3.00	27.50
	*Agnes S. Clark. Apricot salmon.....	Med.	Single	Sept. 25	3.00	27.50
	Sunkist. Orange bronze.....	Short	Decor.	Sept. 25	3.00	27.50
	*Mercury. Blend of old rose and salmon.....	Med.	Single	Sept. 30	3.00	27.50
X	Francis Whittlesey. Rich bronze and garnet.....	Short	Decor.	Sept. 30	3.00	27.50
	*Autumn Lights. Coppery bronze.....	Short	Semi-dble.	Sept. 30	8.00	75.00
X	A. Barham. Orange bronze.....	Short	Decor.	Oct. 1	3.00	27.50
	*Orange Wonder. Deep coppery orange.....	Med.	Decor.	Oct. 1	3.00	27.50
	Amoskeag. Buff bronze.....	Short	Semi-dble.	Oct. 1	3.00	27.50
	Sonoma. Bronze with golden reverse.....	Med.	Decor.	Oct. 1	3.00	27.50
	Little Bob. Dark reddish bronze.....	Med.	Button	Oct. 1	3.00	27.50
	*Louise Schling. Bronze salmon.....	Med.	Single	Oct. 5	3.00	27.50
	*Vulcan. Bronze crimson.....	Med.	Single	Oct. 5	3.00	27.50
	*Romany. Reddish bronze.....	Med.	Decor.	Oct. 5	3.00	27.50
	Marisa. Orange bronze.....	Short	Single	Oct. 10	3.00	27.50
	*Mandarin. Coral salmon.....	Med.	Decor.	Oct. 10	4.00	35.00
	*Goblin. Golden bronze.....	Med.	Decor.	Oct. 10	8.00	75.00
	*Apollo. Bronze red.....	Med.	Single	Oct. 12	3.00	27.50
	*Saturn. Bronze.....	Med.	Single	Oct. 12	3.00	27.50
	*Ember. Coral and orange bronze.....	Med.	Decor.	Oct. 15	3.00	27.50
X	Granny Scovill. Warm coral bronze.....	Short	Decor.	Oct. 15	3.00	27.50
X	Indian Summer. Bronze.....	Med.	Decor.	Oct. 25	3.00	27.50

PINK

	Clara Curtis. Salmon pink.....	Short	Single	Aug. 28	8.00	75.00
XP	Amelia. (Pink Cushion). Bright pink.....	Short	Semi-dble.	Sept.	3.00	27.50
P	Glada. Soft pink.....	Short	Decor.	Sept.	3.00	27.50
	Provence. Soft pink blended with yellow.....	Med.	Decor.	Sept.	3.00	27.50
	Roberta Copeland. Rose pink.....	Short	Semi-dble.	Sept. 15	8.00	75.00
	Panola. Deep lavender.....	Short	Decor.	Sept. 15	3.00	27.50
	Otsego. Deep lavender.....	Short	Decor.	Sept. 15	3.00	27.50
	*The Moor. Amaranth purple.....	Short	Decor.	Sept. 25	3.00	27.50
	*Pink Lustre. Orchid pink.....	Med.	Single	Sept. 25	3.00	27.50
	Muskogee. Deep lavender.....	Short	Semi-dble.	Sept. 27	3.00	27.50
	Manantico. Light rose pink.....	Short	Single	Sept. 27	3.00	27.50
X	Albert Muller. Apricot suffused with pink.....	Med.	Decor.	Oct. 1	3.00	27.50
XP	Eden. Rose pink.....	Short	Decor.	Oct. 1	3.00	27.50
	*Psyche. Pale rose pink.....	Med.	Single	Oct. 1	3.00	27.50

"Get Your Orders In Early"

Hardy Varieties (Continued)

PINK

		Height	Type	Matures	Price per	
					100	1000
X	Jean Treadway. Pink with dark center.....	Med.	Decor.	Oct. 1	3.00	27.50
	Passumpscic. Deep lavender.....	Short	Decor.	Oct. 1	3.00	27.50
	Pohatcong. Pale lavender.....	Short	Decor.	Oct. 1	3.00	27.50
	*Burgundy. Amaranth	Med.	Decor.	Oct. 5	8.00	75.00
	Rose Glow. Raspberry changing to Opalescent rose	Short	Semi-dble.	Oct. 5	8.00	75.00
	Lilyan. Pale rose pink.....	Short	Decor.	Oct. 5	3.00	27.50
	Lavender Lady. Lavender.....	Med.	Decor.	Oct. 8	8.00	75.00
	*Country Girl. Pink.....	Tall	Single	Oct. 10	3.00	27.50
	*The Urchin. Crushed raspberry and gold.....	Med.	Semi-dble.	Oct. 10	3.00	27.50
	*Symphony. Mauve, coppery pink and lavender..	Med.	Decor.	Oct. 12	3.00	27.50
X	Ganna. Bright pink.....	Med.	Decor.	Oct. 12	3.00	27.50
	Muldoon. Amaranth	Med.	Decor.	Oct. 12	3.00	27.50
	*Daphne. Pink	Med.	Single	Oct. 12	3.00	27.50
	*Venus. Pink	Med.	Single	Oct. 12	3.00	27.50
	*Diana. Rose pink.....	Med.	Single	Oct. 12	3.00	27.50
	Murillo. Light lavender.....	Med.	Decor.	Oct. 12	3.00	27.50
	*Hebe. Lavender pink.....	Med.	Single	Oct. 15	3.00	27.50
X	Rosy Gem. Bright pink or rose.....	Med.	Decor.	Oct. 15	3.00	27.50
	*Aphrodite. Blush pink.....	Short	Single	Oct. 15	3.00	27.50
	Kuzuka. Rose pink with quilled yellow center....	Short	Decor.	Oct. 20	3.00	27.50
	*Melody. Light rose pink.....	Med.	Single	Oct. 25	8.00	75.00
	Sonia. Deep lavender.....	Short	Decor.	Oct. 25	3.00	27.50
	Pink Spoon. Lavender.....	Med.	Spoon	Oct. 30	8.00	75.00

RED

	Red Cushion. Red.....	Short	Semi-dble.	Sept.	3.00	27.50
	Deanna. Bronze red.....	Short	Decor.	Sept. 10	3.00	27.50
	Flashlight. Crimson	Short	Decor.	Sept. 20	3.00	27.50
	Edgar A. Guest. Bronze red.....	Short	Decor.	Sept. 25	5.00	40.00
	*Nancy Copeland. Red.....	Med.	Single	Sept. 25	3.00	27.50
	Gypsy Girl. Chestnut crimson.....	Short	Single	Early Oct.	3.00	27.50
X	Ruth Cummings. Reddish bronze.....	Med.	Decor.	Early Oct.	3.00	27.50
	*Caliph. Deep red.....	Med.	Decor.	Oct. 1	4.00	35.00
	Vivid. Rosy crimson.....	Med.	Decor.	Oct. 1	3.00	27.50
	Crimson Splendor. Light red.....	Short	Single	Oct. 1	3.00	27.50
	Brilliancy. Crimson orange.....	Med.	Single	Oct. 1	3.00	27.50
	Crimson Glory. Deep crimson.....	Short	Decor.	Oct. 5	3.00	27.50
	Sandra. Deep crimson.....	Short	Decor.	Oct. 5	3.00	27.50
	*Saladin. Oriental red.....	Med.	Single	Oct. 10	4.00	35.00
	Dazzler. Cardinal red.....	Med.	Single	Oct. 10	3.00	27.50
XS	Cavalier. Rich vermilion red.....	Med.	Single	Oct. 15	3.00	27.50
	Red Flare. Bright red.....	Med.	Button	Oct. 15	3.00	27.50
	*Mars. Wine red.....	Med.	Single	Oct. 15	3.00	27.50
	Red Hussar. Scarlet crimson.....	Short	Single	Oct. 15	4.00	35.00
	Red Spoon.....	Med.	Spoon	Oct. 30	8.00	75.00

*—Indicates Korean varieties.

Japanese Mountain or Cascade Varieties

X—Extra good or generally accepted best varieties.

P—Indicates varieties suitable for Pot Plants.

NOTE CAREFULLY INSTRUCTIONS FOR ORDERING ON PAGE TWO

	Name and Description	Height	Matures	Price per	
				100	1000
XP	Anna. Pure white single.....	Short	Oct. 30	\$6.00	\$50.00
XP	Jane Harte. Yellow single.....	Short	Oct. 30	6.00	50.00
	Brown Button. Bronze.....	Med.	Nov. 10	6.00	50.00
	Agappina. Mahogany with tinge of yellow on the tips of the cushion florets.....	Med.	Nov. 10	6.00	50.00

"Check Discounts On Page 2 For Early And Quantity ORDERS"

Pot Plant Varieties

PLEASE NOTE SYMBOLS USED FOR THIS CLASS

The varieties listed below include those of all types which have been found most suitable for pot culture. Types are indicated by Single, Anemone, Decorative, Pompon, and Incurved. Size of flower is indicated by S—Small; Int.—Intermediate; L—Large; and L.F.—Large Flower commercial.

X—Extra good or generally accepted best varieties.

S—Indicates varieties we find most suitable for shading.

NOTE CAREFULLY INSTRUCTIONS FOR ORDERING ON PAGE TWO

YELLOW

Variety	Type	Spray or Disbud	Blooming Date	Price per	
				100	1000
Early Yellow. Yellow. Sport from Early Bronze	S. Pomp.	Spray	Sept. 15	3.00	27.50
Pomponette. Primrose yellow.....	Int. Pomp.	Spray	Sept. 20	8.00	75.00
Gold Lode. Golden yellow.....	L.F. Dec.	Disbud	Oct. 1	3.00	27.50
S Golden Spray. Yellow.....	Int. Pomp.	Spray	Oct. 15	3.00	27.50
Cincinnati. Golden yellow.....	L. Pomp.	Disbud	Oct. 20	8.00	75.00
XS Rodell, Imp. Yellow, sport from Rodell; excellent	Int. Pomp.	Spray	Oct. 20	3.00	27.50
S Golden Wave. Yellow.....	L.F. Incurv.	Disbud	Oct. 20	3.00	27.50
X Judith Anderson. Yellow.....	S. Pomp.	Spray	Oct. 25	3.00	27.50
Yellow Caprice. Yellow.....	Int. Dec.	Dis. or Spr.	Oct. 25	3.00	27.50
Smith's Superlative. Golden yellow.....	L.F. Dec.	Disbud	Oct. 25	3.00	27.50
XS Nuggets. Best early yellow.....	S. Pomp.	Spray	Oct. 25	3.00	27.50
Yellow Izola. Buff yellow.....	S. Anem.	Disbud	Nov. 1	3.00	27.50
X Ohio State. Yellow.....	Int. Anem.	Disbud	Nov. 1	3.00	27.50
XS Golden Glory. Golden yellow.....	L.F. Incurv.	Disbud	Nov. 1	3.00	27.50
Baby. Yellow	S. Pomp.	Spray	Nov. 10	3.00	27.50
Lila Lilly. Lemon yellow.....	Int. Anem.	Disbud	Nov. 10	8.00	75.00
Yellow Beauty. Golden yellow.....	L. Pomp.	Disbud	Nov. 10	4.00	35.00
X Lois. Golden yellow.....	S. Pomp.	Spray	Nov. 15	3.00	27.50
X Sunray. Yellow	S. Anem.	Spray	Nov. 15	3.00	27.50
Faith Engle. Yellow with golden yellow cushion	S. Anem.	Spray	Nov. 15	4.00	35.00
XS Yellow Fellow. Yellow.....	Int. Dec.	Dis. or Spr.	Nov. 18	3.00	27.50
Bonnaffon DeLuxe. Golden yellow.....	L.F. Incurv.	Disbud	Nov. 20	3.00	27.50
X Bright Light. Bright yellow.....	L. Dec.	Disbud	Nov. 20	3.00	27.50
X Yellow Rolinda. Deep golden yellow, sport from Rolinda	Int. Anem.	Dis. or Spr.	Nov. 20	3.00	27.50
X Sun Gold. Yellow.....	L.F. Dec.	Disbud	Nov. 25	3.00	27.50
X W. H. Lincoln. Yellow.....	L. Pomp.	Disbud	Nov. 25	3.00	27.50
Sunshine. Yellow	Int. Anem.	Disbud	Nov. 25	3.00	27.50

WHITE

XS White Jewell. White suffused with pink....	S. Pomp.	Spray	Oct. 10	3.00	27.50
XS Irene. White	S. Pomp.	Spray	Oct. 15	3.00	27.50
Christina. White, sport from Rose Chochard	L.F. Incurv.	Disbud	Oct. 20	3.00	27.50
X Graceland. White with yellow center.....	Int. Anem.	Disbud	Oct. 25	3.00	27.50
White Caprice. White.....	Int. Dec.	Dis. or Spr.	Oct. 25	3.00	27.50
X Mary Pickford. White.....	S. Pomp.	Spray	Nov. 1	3.00	27.50
White Izola. White. Sport from Izola.....	S. Anem.	Disbud	Nov. 1	3.00	27.50
Richard Mandel. Pure white.....	L. Pomp.	Disbud	Nov. 10	4.00	35.00

BRONZE

X Early Bronze. Orange bronze.....	S. Pomp.	Spray	Sept.	3.00	27.50
Bronze Lode. Light bronze. Sport from Gold Lode	L.F. Dec.	Disbud	Oct. 1	3.00	27.50
Tango. Chinese red.....	L. Pomp.	Disbud	Oct. 15	7.00	65.00
X Bonnibell. Orange buff.....	S. Pomp.	Spray	Oct. 15	3.00	27.50
Carlina Lee. Dark rich red.....	Int. Dec.	Disbud	Oct. 20	3.00	27.50

Get Your Mum Orders In Early

Pot Plant Varieties (Continued)

BRONZE

Variety	Type	Spray or Disbud	Blooming Date	Price per	
				100	1000
Thorina. Reddish bronze.....	Int. Pomp.	Spray	Oct. 20	5.00	40.00
X Kathleen Thompson. Bronze.....	Int. Dec.	Disbud	Oct. 25	3.00	27.50
Ethel. Bronze	S. Pomp.	Spray	Oct. 25	3.00	27.50
Bronze Prince. Bronze.....	L. Dec.	Disbud	Nov. 1	3.00	27.50
X Autumn Glow. Bronze red.....	Int. Dec.	Dis. or Spr.	Nov. 1	3.00	27.50
X Floradora. Light rose florets, orange cush.	Int. Anem.	Disbud	Nov. 1	3.00	27.50
X Glitters. Bright bronze.....	L.F. Dec.	Disbud	Nov. 1	3.00	27.50
X Bronze Buckingham. Bronze.....	Int. S'gle.	Dis. or Spr.	Nov. 5	3.00	27.50
X Melba. Reddish bronze.....	L. S'gle.	Disbud	Nov. 5	3.00	27.50
Brutus. Bronze	Int. Dec.	Disbud	Nov. 10	3.00	27.50
Greystone. Golden orange.....	L. Pomp.	Disbud	Nov. 10	3.00	27.50
Gypsy. Pale reddish bronze.....	S. Anem.	Spray	Nov. 15	4.00	35.00
X Rolinda. Orange bronze.....	Int. Anem.	Dis. or Spr.	Nov. 20	3.00	27.50
X Red Rolinda. Red. Sport from Rolinda.....	Int. Anem.	Dis. or Spr.	Nov. 20	3.00	27.50
Mrs. Beu. Standard bronze.....	Int. Dec.	Disbud	Nov. 25	3.00	27.50
Hope Engel. Rich bronze.....	S. Anem.	Spray	Nov. 25	4.00	35.00
Red Beu. Reddish bronze.....	Int. Dec.	Dis. or Spr.	Nov. 25	3.00	27.50

PINK

XS Jewell. Bright rose pink.....	S. Pomp.	Spray	Oct. 10	3.00	27.50
S Justrite. Pink	L.F. Incurv.	Disbud	Oct. 15	3.00	27.50
Rose Chochard. Pink.....	L.F. Incurv.	Disbud	Oct. 20	3.00	27.50
X Benoit. Deep pink.....	Int. Pomp.	Disbud	Oct. 20	3.00	27.50
Persian Rose. Rose pink.....	Int. Pomp.	Spray	Oct. 20	3.00	27.50
Pink Beauty. Light pink.....	L. Pomp.	Disbud	Oct. 20	3.00	27.50
X Butler's Caprice. Deep pink.....	Int. Dec.	Dis. or Spr.	Oct. 25	3.00	27.50
X Lilac Caprice. Deep lilac.....	Int. Dec.	Dis. or Spr.	Oct. 25	3.00	27.50
X Purple Caprice. Purple.....	Int. Dec.	Dis. or Spr.	Oct. 25	3.00	27.50
X Thyra. Dark pink.....	L. Pomp.	Disbud	Nov. 1	3.00	27.50
Izola. Amaranth	S. Anem.	Disbud	Nov. 1	3.00	27.50
Laelia. Rose pink.....	Int. Anem.	Dis. or Spr.	Nov. 1	3.00	27.50
X Margo. Pinkish violet outer petals, with high, round yellow cushion.....	S. Anem.	Dis. or Spr.	Nov. 5	3.00	27.50
X W. H. Buckingham. Pink.....	Int. S'gle.	Dis. or Spr.	Nov. 5	3.00	27.50
X Pygmy. Light pink.....	Int. Pomp.	Dis. or Spr.	Nov. 10	3.00	27.50
Queen of Pinks. Pink mandel.....	L. Pomp.	Disbud	Nov. 10	4.00	35.00
Ethrelda. Light lavender.....	Int. Anem.	Disbud	Nov. 12	5.00	40.00
X Orchid Beauty. Orchid with golden cushion	Int. Anem.	Disbud	Nov. 15	3.00	27.50
Little Amethyst. Pale lavender.....	S. Anem.	Spray	Nov. 15	8.00	75.00
Masterpiece. Tourmaline pink.....	Int. Pomp.	Dis. or Spr.	Nov. 15	3.00	27.50
Patty. Pink	L. Pomp.	Disbud	Nov. 25	3.00	27.50
Amaranthea. Purplish crimson.....	Int. Pomp.	Spray	Dec. 10	5.00	40.00

RED

Red Izola. Amaranth red.....	S. Anem.	Disbud	Nov. 1	3.00	27.50
X Red Melba. Red.....	L. S'gle.	Disbud	Nov. 5	3.00	27.50
Harvard. Crimson	L.F. Dec.	Disbud	Nov. 30	3.00	27.50

Enclose Your Mum With Your Seed Order

NOTES ON MUM CULTURE

By Geo. J. Ball

Treatment of this subject might be divided into two main phases, first, producing uniformly good stock, for unless this is done Mums or any other crop will not be profitable: second, studying production costs. Chances are if this isn't done, they won't leave a margin, without which we just can't carry on. This makes the economic factor important.

Many points enter into the production of good stock, but the three fundamental ones are clean, fairly enriched soil, timely planting, and using unchecked stock. Plenty further details, of course, but in analyzing failures these fundamentals most frequently seem responsible. Proper care of stock plants is the first concern of the grower. If stock plants are plentiful and full of runners, the cleanest start is to use the runners for stock, discarding the old plant. Even if grown in Fla. or Calif., Mums insist on at least a brief rest during mid-winter. For this reason the greenhouse grower plants his young stock in a cold house; with the coming of longer days they naturally wake up. If stock is infected with midge it must be sprayed or fumigated regularly and persistently with most any of the commercial materials recommended for aphids. To do this effectively is costly work, but unless the infestation is cleaned up before cuttings are taken, chances are it will pay well to burn every stock plant, at least that is the ver-

dict of growers who keep cost records. The ideal time to take cuttings is a month to six weeks before ready to plant. For several reasons it is best to plant rooted cuttings direct. Not only is the extra labor and space required for the early propagation avoided, but unchecked rooted cuttings will start off and continue to grow freer than the more or less checked early start. The ideal start is to have all rooted cuttings on hand the day you are ready to plant.

For stock to be shaded for early flowering, we get our planting done from May 1 to 10, tho the cold house pictured on front cover was planted April 21, which is better to lengthen stems on rather short stemmed varieties like Major Bowes. For growing naturally, without shading, late May or early June is, in our latitude, early enough for rooted cutting planting. We fail to see how it is possible to make a profit on July planting. Neither do we generally find it pays to grow planting stock in the field and plant late July-August because of the tendency of such stock to come blind, and the extra labor connected with it. Growth in the shallow soil of a raised bed is better controlled and tends to become harder than in a deep ground bed; but if such beds are well drained and if the lower soil is examined occasionally and not kept too wet, they will produce practically as good commercial Mums as

will a raised bed. While it doesn't make any material difference what type of soil is used for Mums, or most crops, a very heavy or light or sandy one should be avoided, or corrected thru the use of decayed manure or organic matter, the material that all good soils are largely composed of. But what about this fundamentally correct statement in the light of soil-less culture? While this revolutionary method quite up-



One of our cold houses showing cloth used on roof. This material is waterproofed canvas, cost around 16c per sq. yd. and is used for early flowering shade, after which it is left in position to be used for protecting the crop in flower from rain and frost. The sash bars used in this cold house are spaced 2 ft. and are only for supporting the rather heavy cloth. If we were to put up another, we would use pipe frame construction, believing it would pay because of being more rigid.

sets our idea of the value of organic matter, do not overlook its need in ordinary soil culture, for it seems necessary for the purpose of unlocking fertility in soil. Our soilless culture experience with this crop has been uniformly successful. It inclines us to believe that some of the principles of this plan, light soil to begin with, that is more freely aerated, might be used in ordinary culture: water and feed to be applied as with soil. We believe that a reason for the freer growth we get in gravel is due to the air that is drawn in and out three times daily. But getting back to what Mums are generally grown in, don't use old greenhouse soil unless it is sterilized. If not in a position to do this, it will pay to wheel in fresh. While Mums as well as most crops seem to flourish in soil with the pH at around neutral, investigators generally recommend that it be slightly on the acid side for this crop. As soon after planting as we can get to it, we apply a top dressing of Michigan Peat. This assures the soil on the acid side. Do not use lime unless too far on the acid side. Spacing is important and depends some on varieties, but largely on whether two or more small flowers or one large one is most profitable.

The wholesale market demand for standard Mums is quite generally for fairly large uniform flowers. Up to last season our standard practice was one flower to a plant, spaced generally 7x8 in. The past season we spaced part of all varieties 7x11 in., with two to a plant: with most varieties a glance at both spacings would show but little difference in flower size, but on cutting them out, we, of course, got quite a few small ones, but one of the two on nearly every plant was large. This two to a plant plan would seem ideal for a retail grower. On the other hand some such growers find they get more returns from as much as 4-5 small flowers than from 1-2 large ones. In England nearly all are grown 8-10 or more to a plant. For the Paris market the larger they are the better; so the answer to this question depends on your demand. Chances are that our average retail grower will want both large and small.



"October Pink" the new single that doesn't lose its color when shaded. Heavy producer, clear rose pink. That's John Jacobs, West Chicago, Illinois, the grower on the right.

The center bed in our front cover picture represents Apricot Queen, two to a plant, quite uniformly good market size. To the right is Betsy Ross, same spacing with a larger percentage of small ones. There is an attractive and a limited demand for the great big ones and it might be profitable to use some of the exhibition kind like the Turners or Pockets for this. A very nice market grade of most anemones are produced with about 3 flowers to a plant, spacing 8x8 in. Pompons vary in vigor. The New York type of growth is restricted and unprofitable unless spaced 6x6 for rooted cuttings, topping at 6-7 in. and carrying up but two stems. We are using this close spacing for all Pompons, especially if used for shading. When the number of growths is limited to 2-3, the stems draw out longer because of all growth being concentrated in them. In growing Pompons for cutting, it is a real mistake to top several times and carry all growths, because some will be blind and weak. This close spacing calls for more plants but more uniform results and longer stems makes it profitable.

SUPPORTS

The most efficient way to support pompons is the wire and string method used by Carnation growers. The standards or large ones are sometimes tied to wire stakes; sometimes to three or four lines

of horizontal wires. The plan more generally used is to tie the end of a string about the base of each stem, the other end to an overhead wire. As the growth lengthens it is merely wrapped about the string. The overhead wire for this plan must be quite tight and frequently supported or the pull of the strings will sag it. The Chrysanthemum being very much a cool temperature plant, it follows that mid-summer temperatures of 90-100 degrees are not going to find them very happy. Under these conditions growth comes to more or less of a stand still: it follows that the roots feel the heat as well and that they will call for less water, or if watered freely as you can during spring and fall, weak growth or yellow leaves and decaying of roots will follow. We do not use any top dressing or feed either, during such conditions. If planted in fairly enriched soil to start with, they should stand a top dressing of some balanced fertilizer in June and again late in

August or September. Use 2-4 pounds to 100 square feet according to vigor of growth. We use a 5-15-5 mixture, varying it according to what an analysis of the soil indicates is lacking, or in over supply.

Old greenhouse soil that is so generally used for this crop, is frequently overloaded with fertility from what has been applied for previous crops. With peas this soil condition is frequently responsible for sickening of roots and we believe this sometimes accounts for weak spots in Mum beds. We know that a heavy leaching with hot water will correct this condition. Steam sterilizing will also do it especially if followed with a thoro saturating of cold or hot water. The wilt or yellowing disease known as *Verticellium* will carry over in soil: also in young stock propagated from affected plants. It is controlled by steam sterilizing soil and carefully avoiding affected plants in propagating. Affected plants should be burned. Also, keep this in mind: practically all forms of rot or fungus



One of our cold houses of Silver Sheen, photoed Sept. 17th; shade started July 10th. Note Aster Cloth on sides to bar insects. The variety Albatross, planted and shaded with Silver Sheen, will immediately follow it in flowering.

diseases are encouraged and spread by excessive atmospheric moisture. Overhead spraying or wetting down refreshes and promotes growth: also keeps red spider in check. This should be done once or twice daily during July and August, but, if this is done after 3 or 4 o'clock in the afternoon it will leave the plants too wet, overnight.

TAKING BUDS

Dates for selecting them for all large or standard varieties will be found in connection with their listing in this catalog. It is difficult to be accurate with this information because of varying seasons, climates and planting dates, all of which have more or less influence on the type of buds produced, so the dates given can only be approximately right.

Large Mums produce two types of buds. Briefly stated "crown" buds appear early, are rather large and are not surrounded by a number of other buds as are the "terminals" that come later and terminate the growth. Generally speaking the early or October flowering varieties come best on crown buds, but such should not be used if they show up quite early—a week or two before the dates given in the list, that is based on experience in the northern or central states. Where the days do not shorten so early as in the south, bud selection or development will be deferred some.

SHADING FOR EARLY FLOWERING

Lack of space will not permit much detail on this valuable subject: it will be found more fully treated in the last or 5th edition of our Ball Red Book, that will go to press soon as this catalog gets in your hands. Early flowering thru this simple process is based on the "short day" nature of Mums by which is meant setting of buds is induced by the shortening daylight hours. If daylight hours did not shorten, buds would not set at all on any class of Mums.

This is proven by using electric lights to defer bud setting and flowering of special varieties wanted later. We will touch on this subject later. All classes of Mums



Our cloth house planting figured out profitably last season, but they must be planted by Mid May and sometimes we get hard frosts after that.

respond alike to the shading treatment. For 3-4 weeks from the time shading is started, buds are set regardless of length of stem: for this reason early planting is necessarily important or short stems will of course, result. With our growing conditions planting of shading stock should be done from May 1 to 15—not later. For varieties not naturally long stemmed such as Apricot Queen pictured on front cover, center bed, later April planting is better. From 50-60 days should be figured from start of shading to cutting of crop. This varies some with varieties: the later varieties require some more time than the early or October kind. Our earliest shading of big standards begins July 10. Successive starts are made a week or 10 days apart to spread the crop. A black sateen cloth furnished by a number of firms is largely used and if cared for, will last 3-4 years, but after two years, some light will filter thru it, requiring a few days or a week longer to set buds. This cloth costs 22c per square yard. We are inclined to favor a grade of kraft paper, made by the Sisal-kraft Company, 205 W. Wacker Drive, Chicago. This costs in quantity 10c per square yard, and if not too much exposed will do for two seasons. We find this works out well for the top of beds: it is rolled up or out on a pole in 15 foot sections; but for sides, cloth attached to a wire, and that can be pushed back and forth should be used. For small houses, we cover the roof and sides with one piece. There is considerable saving in material in this over all plan for when beds are shaded individually the sides of each must be in-

cluded. Except when regularly heated greenhouses are used, any shading material used should be left in place to be unrolled as a possible protection against frost or rain. More time is required in shading pompons because of some lateral bud setting that must take place before shading stops: in fact we continue the shade until first or terminal buds show color. Shading should be continued on the large flowering kind until the most forward buds are around $\frac{1}{2}$ inch in diameter. Intensive



This variety, Peggy Ann Hoover, might be of more value as an attraction than any on the list, something different, here it is.

breeding for size is perhaps responsible for the fact that, generally speaking the larger flowers are, the softer they become. In Mums we know that exhibition kinds like the Turners would be useless to flower in September because they lack enuf hardness to prevent rotting thru the heat and wet spells of that month. In even the moderate size varieties some are too soft for September, others characteristically hard. The small pompons are the hardest of any and can be exposed to dampness without harm. We had a cloth house planting this fall in full flower when the temperature went down to 22°. Under the shading cloth pulled over them it got down to 32° and, as it usually does, this happened during a few days of rainy weather. But when flowered in the open we find them around 10 days later in flowering than when planted in an ordinarily heated greenhouse with the same shading treatment. Because of the greatly reduced overhead or investment we find this outdoor planting worth while. Next season we will locate this planting so a few 1 in. steam pipes can be run into it. This, with the shading material in place will enable us to plant it around the 20th of April and assure us greater fall protection. Early planting assures longer stems and a first class bunch of pompons must be on at least 3-4 foot stems and if you cut them down too low into the hardwood they wilt.

VARIETIES

As far as growth and bud setting is concerned, all varieties react alike to shading. But due to the temperature of September being higher than that of their normal

flowering season, some varieties change color considerably. The October flowering rose pink kind, when flowered during warm September weather, fade considerably. October Rose is the generally preferred one. Major Edward Bowes is the deepest colored October variety but rather short stemmed or of compact habit. The bronze November 1 variety Apricot Queen is another example of how some colors change under shade. When this is shaded into flower in the warmth of late September, it is an attractive deep or dark yellow, a fine market color. While colors or shades of shaded stock depends on temperatures in which they are flowered, practically all the clear yellows and whites come true when flowered early. Even such a deep yellow as Friendly Rival loses little of its fine color when flowered early. Another important point, as already mentioned is durability or hardness of flower. In offering the following list of October varieties for early or September flowering, this point is considered. This list is as follows and includes only the most popular kind: Good News, Blazing Gold, Mrs. H. E. Kidder. In yellows we find Citronella, inclined to come weak in growth, especially in ground beds. In white Silver Sheen, Albatross, and Snow White are largely used tho the last named is not as hard as the other two. The popular Betsy Ross we have dropped for we find it weaker and clearly more susceptible to disease and red spider than the others grown along side them. Detroit News stands quite alone among bronze colors tho Hilda Bergen is sometimes used. Popular late varieties for shading are Marketeer, Chas. W. Johnson, Glitters, Apricot Queen,

Gladys Pearson, Indianapolis Pink, Thanksgiving Pink, and Mrs. David F. Roy.

In Pompons, Singles, and Anemones, most all clear colors on the list are safe for early flowering. Among the early pompons for September flowering, we depend largely on the following: Nuggets, Improved Rodell, Adelaide, Sea Gull, Pink Dot, Crystal Jewel, Jessie, and Yellow Dot. Sea Gull is an ivory white but hard. Arcadia is pure white but not hard enuf for September, but perfect to flower in October. Chicago Pearl is fine to flower in October; so is Mary Lennon Hall, that we find identical with Vera Victoria. Among the singles we especially like Absolute, California Gold, Buckingham, Gretchen Piper, Joe Beuerlein, Dark Pink Valencia, and October Pink, an especially free flowering one for shading. Among the Anemones don't miss Beautiful Lady. Blanche, Dark Pink Norma, Frieda, Garza Supreme and any of the Espy colors or varieties. Among the hardies don't fail to try the variety listed as "Early Bronze," also Early Yellow. This is a real light tan pompon, perfectly hardy with us and nice for October flowering without shading. In carrying it over winter it might be safer to cover it with some coarse material. Another variety, pictured on previous page is Peggy Ann Hoover. While this type is difficult to ship, a few of them for their very attractive form should interest any retail grower.

POT PLANTS

The demand for well grown plants in pots is clearly increasing and can be helped along with well grown COMPACT plants. There is an active demand for such, especially in our large centers. Tall, straggly stuff, on the other hand, is not inviting to buyers and usually a loss to growers. But unsold pot plants can, of course, be cut down. In all potting or repotting, use clean fresh soil, for some of the diseases Mums are susceptible to are carried along in old greenhouse material. Also, soil should, when final repotting is done, which is usually into 5 in., be increasingly enriched. For good 6 in. specimens, cuttings should be ready to pot in April and at this rapidly growing season, strong cuttings can go directly into 3 in. **DON'T LET THEM GET HARDENED OR CHECKED BY BECOMING POT BOUND IN SMALL POTS BEFORE SHIFTING.** Usually three plants are used together in this final potting and for varieties not so vigorous, four plants are frequently used together. The first topping is usually done when the plants are 4-6 in. tall and again in late

June or July. Such varieties as are inclined to draw up, some topping or trimming back should be done late in July. Cuttings potted early in April for 6 in. plants will, by May 1, provide an excellent cutting that will make fine stock for finally putting 3 or 4 in a 5 in. pot. After the plants get into vigorous growth in their flowering pots, they must occasionally be helped along with light top dressings of preferably a balanced fertilizer. We occasionally see nice plants grown in an outdoor frame all summer, but most specialists prefer to keep them in a low, well ventilated, unshaded house where they are protected from storms, hot winds, and insects. But the outdoor frame plan is a profitable one if the frame is sheltered from strong winds. It is particularly convenient if the plants are to be shaded for mid-September flowering. The effect of the full outdoors on pot plants is to harden, invigorate, and keep them compact. For this reason, greenhouse grown plants can well be exposed to the outdoors for a month or 6 weeks of mid-Summer. An important detail in the growing of pot plants is in the hands of the man with the hose. Right after potting, they can be easily turned yellow by excess water, but after they become well rooted and in full growth in a 5 in. pot, they absorb much water and quickly become dry enuf to harden and dry up lower foliage unless closely watched. We have seen an overhead sprinkling system used on outdoor grown stock to good advantage. But there is danger of overwatering with it unless closely watched. The Caprice varieties and the smaller flowered kinds, were formerly largely used for pot plant purposes. Today, while all classes are used, the large flowering ones are principally depended upon; your customers will select plants with largest flowers. The following are especially popular with one of the largest successful pot plant growers in the following order: Friendly Rival, Sun Gold, Ohio State, Glitters, Golden Herald, Hilda Bergen, Thanksgiving Pink, Apricot Queen, White Chief, and Justrite. And with this same grower, the following Pompons and Anemones are used in the order named: Nuggets, Rodell Imp., Red Rover, Beautiful Lady, Kathleen Thompson, Caprice Butler, and Little America. The cooler climate of England and Canada permits flowering an early class that naturally gets in around Sept. 1, averaging about half the size of our big Oct. kind and available in a full line of colors, we believe they should have value for us as pot plants.

TO DELAY FLOWERING

This is done thru prolonging daylight with electric lights as already suggested. For mid-season kind, turn on lights about Aug. 20. For December varieties, start a week later. Do not start later, or finished stock will tend to have long necks and sometimes, malformed flowers. Use 40 Watt bulbs with reflectors. Space lights 5 feet and high enuf to spread the light well over the bed. Turn lights on when darkness is reached and for 3 hours daily. Continue the lighting for three-fourths as many days as it is wished to delay flowering; in other words, if you wish to defer flowering 20 days, keep the lights on them 15 days. It is not considered practical to delay flowering more than 3 or 4 weeks. Take first bud showing after light treatment stops.

SOME ECONOMIC SUGGESTIONS

Growing a good bed or house of Mums is one thing. Making it figure out a profit is something else. As a grower I sometimes wish cost accounting was never thot of, for, what it reveals sometimes takes the interest and pleasure out of growing. But we have to pay our help, coal bills, and our soaring Roosevelt made taxes; and, we must make a profit and we should try and do so without working 12-14 hours daily ourselves. Making a profit in any business calls for a certain amount of business ability that can be cultivated. You can sometimes make more profit by sitting down and carefully figuring out your business than you can by hours of digging.

Among a few points for saving costs we find the planting of rooted cuttings in place of early propagated stock a distinct saving: moreover we get better results. If cuttings are ready to take in January or early February, either top the growth or root and plant the cuttings for producing more cuttings in March-April which is the better time to take them in our latitude for rooted cuttings to plant in May.

We also figure a distinct saving thru growing our Mums in what we call "cold houses." Reason for this is that we don't have so much depreciation to figure on such houses, and this figure is a heavy one in our modern houses. We get better results too because the sides in these structures are open, making them airy and cooler than a regulation house. Also, there is a lot of work in connection with Mum growing that should be done by boys and girls or inexperienced help.

And finally, if you can buy rooted cuttings in quantity at around 2 cents does it pay to produce them?

While this might be a debatable question, the fact is that every season more large growers who keep close records, and whose order runs from 50 to 125,000, claim it does not. The grower whose planting is much more limited and who can't buy quite so close might feel different, but, usually such growers retail and are at the height of their busy and crowded season when propagating should be done. Some such growers feel that it pays them better to buy than it does the large growers. Besides, the direct cost of growing your cuttings, there are indirect advantages to consider such as, having your cuttings delivered to you the day you have figured to plant. Also, when you buy annually, the order should be made up in the fall from notes on varieties as they are seen in flower. Frequently our planting consists largely of kinds that produce cuttings most freely and frequently enuf such are inferior. And what about direct costs? Various figures are given on the cost of producing cuttings. We have noted them all the way from 1¼ cents to 2½. We question whether these figures represent all the cost such as, various overhead charges and losses thru cuttings rotting in spring. To produce first class cuttings, a well exposed light bench for stock plants is necessary. If you can get the figure on what a flowering crop would be worth from such a bench, the first figure to charge against your Mum cuttings would be had. And what about the cost in time and material used in fighting midge? Very few growers are free of this costly pest. An increasing number of retail grower crops are being more profitably produced by specialists and for some substantial reasons Mum cuttings are rapidly taking their place among them. Our cuttings are produced in very large quantities and with scientific cleanliness and efficiency. It might be to your advantage to let us hear from you about your supply. In conclusion the writer well recalls a remark made just 46 years ago to the effect that Mums had about reached as high a state of perfection as it was possible to achieve. But what improvements since those days! and this betterment will continue for Mums are very much a staple crop and there is hardly a variety that we can't find some fault with. But increasing attention must be paid to the economic factors involved in their cultivation.

CARNATIONS

For several years our friends in various sections have entrusted us with orders for Carnation cuttings. Because of our position as growers of this crop, it gives us pleasure to extend our service to this line. We have enjoyed carnation experience in the past, are much interested in the improvements of the present, and we look forward to its prosperous future; particularly to improved methods of production.

Of first interest to every grower are the better or improved varieties, or such as respond best to his conditions or demands. Over a period of time varieties definitely do run down because of constant cutting propagation. To maintain vigor as well as to improve them it is necessary to grow new ones thru seed. And if you are going to meet today's competition or the close margins that any business faces, a close watch must be kept for the bettered varieties. Improvement is going on too fast to admit of any doubt of that. Also, if your present stock is at all run down, or substantial losses suffered thru stem rot, the chances are that an investment in fresh stock and better varieties will be a profitable one. **This is especially so when it is considered that the fresh cuttings will cost little more, maybe not any more than your own.**

The production of first class cuttings involves cleanliness, selection of cuttings and careful handling thruout, and this costs. But quality is always well invested in. This is especially true of what you plant in expensive greenhouse space.

We not only keep closely informed on the merits of varieties among other growers, but grow all the leaders ourselves. This experience is at your service. Should you wish information on bettering any particular variety or color you are interested in, we will be very glad to hear from you.

CARE OF YOUNG STOCK IS OF FIRST IMPORTANCE



The young plant left is pinched off where indicated about one month after being transplanted from the sand.

About a month after the first pinching, a number of side shoots develop. As these shoots become large enough, they too are pinched until the grower believes his plant to be of the proper size. It is then allowed to flower.

CARNATIONS FOR 1941

NEW AND RECENT VARIETIES DECEMBER AND LATER DELIVERIES

The descriptions of the new and recent introductions of Carnations are those of the originators. We believe they are honest in their claims and that these varieties have proved of exceptional merit in the section where they have been grown.

It is, however, a well-known fact that many new Carnations do much better in some sections of the country than they do in others. We have in mind the variety Senator. This was a New England introduction of some years back. It proved to be a wonderful white Carnation in the Mid-West, but never had the same popularity in the East.

Study the list below. We feel that any Carnations, whose descriptions appeal to you, are worthy of a trial. Some of them seem to have exceptional merit.



Pollyanna. See next page for description.

No Orders For Less Than 25 Of A Kind Can Be Accepted

NEW AND RECENT VARIETIES

POLLYANNA

For some time there has been a persistent demand for a variety in the salmon flesh color which will compare favorably in quality with the leading commercials and yield sufficiently to be profitable to grow. In our new variety "Pollyanna" we believe that we have it. Being a seedling from Light Pink Abundance crossed with a seedling variety insures its productiveness, the growth being somewhat sturdier and slightly shorter in stem. The bloom is good sized and symmetrical and keeps exceptionally well. The calyx does not split. The color is a good Laddie shade of salmon flesh which holds its freshness late into summer. We recommend Pollyanna to the discriminating grower who strives for quality along with productiveness. It makes fine plants in the field and transplants readily.

"Pollyanna" will be sold under Patent (pending) with the usual propagating privilege granted to purchasers.

\$15.00 per 100
\$125.00 per 1000

CHARM

Laddie Seedling (Rasmussen Patented) An outstanding carnation, slightly darker than Laddie, almost as large and produces almost twice as many blooms. Exceptionally good keeper. \$20.00 per 100
\$150.00 per 1000

SETH PARKER

The new crimson carnation. Looks like a winner not as dark as Woburn. (Patented)
\$20.00 per 100
\$150.00 per 1000

JOYCE

A lovely new deep crimson or maroon seedling originated by Carl Engelmann of England. The variety has been grown in the country

for several years, and is now ready to take its place as a leader in this color class. We believe that it will prove superior to all crimsons now available. The flowers are large and beautifully formed. They are fine keepers. The stem is long. There is very little splitting. The variety is a good producer. It is not restricted.
\$10.00 per 100 \$90.00 per 1000

DIRIGO

A fine deep pink seedling of medium size introduced last year. It is the Ward or My Love shade. Plants are large and bushy, stems are excellent, production is good, and flowers keep well. There is very little splitting.
\$8.50 per 100 \$75.00 per 1000



Sea Shell. See next page for description.

Write Us For Best Variety In Each Color Class

New and Recent Varieties (Continued)

DARK PINK MAYTIME

This is a deep pink sport of Maytime and has the same characteristics as the parent plant. The flower has the same form and substance, but is a little larger than that of Maytime. Production is higher than is that of the average variety. Plants grow tall and erect, allowing close planting. It is a very rapid growing variety. The keeping quality of the flowers is outstanding. The first flowers are of medium pink, similar to Pink Treasure, but they darken rapidly, and within two or three weeks they are the color of Boston Ward, and they remain that color.

\$10.00 per 100

\$90.00 per 1000

WHITE MAYTIME

This is a pure white sport of Maytime, exactly like the parent variety in every respect except color. The Maytime blossom is a beautifully formed flower, and in this rich, pure white it is especially appealing. It is a productive and profitable commercial white.

\$10.00 per 100

\$90.00 per 1000

WHITE PETER FISHER

A pure white sport of the popular favorite, Peter Fisher. Both plants and flowers are like those of the parent plant. The bloom resembles an improved flower of the variety Ivory, but of course the stem and foliage is much heavier. It is a clean and vigorous variety, easy to grow and entirely satisfactory.

\$8.50 per 100

\$75.00 per 1000

HERMOSA

A large and beautifully formed light pink seedling introduced last year. The color is richer and slightly deeper than that of Virginia. The plants are vigorous and free, stems are long and the calyx is firm. Production is good, and the flowers keep perfectly. This is a fine variety for those who have difficulty with Virginia.

\$8.50 per 100

\$75.00 per 1000

SEA SHELL

A large, well-formed, full-petalled seedling having a lovely and delicate shell pink color. Plants of this variety are especially fine, being large and bushy, vigorous and absolutely clean. Stems are long and stiff, but not brittle. The calyx does not split at any time. Production is good, and the flowers keep and ship well. It is an easy variety to propagate and grow, and it is the only new variety with which we are familiar that has been introduced in this light pink color class in recent years. The color is lighter and softer than that of Virginia or Maytime. The parentage is two unnamed seedlings. The variety is not restricted.

\$15.00 per 100

\$125.00 per 1000

PATENTED CARNATIONS

When a grower develops a new Carnation by hybridization or discovers a sport that he believes is a new and distinct type, he may apply for a patent to the U. S. Bureau of Patents. If this Patent is granted, he has the right to sell this Carnation under any restriction he cares to make.

Most introducers of Patented Carnations sell them by having the purchasers sign an agreement similar to the following:

"We agree to propagate only in such quantity as we will need for our own planting. We will neither sell, trade nor give away any plants or materials which might be used for propagating, and we will make every reasonable effort to prevent such material from leaving our premises. We further agree to destroy all plants produced in excess of our own needs for planting."

When this agreement is signed, the owner of the patent grants the purchaser the right to propagate without limit for his own use.

Plant Clean Well-Grown Selected Cuttings. It Pays.

The Well Known Standard List

	Per 100	Per 1000	Johnson color, big small	Crimson. producer. Flowers	Good Flowers		
WHITE:							
White Maytime. See "New and Recent" page for description	\$10.00	\$90.00					
Snow White. Introduced last season, may be the large flower we want	9.00	80.00					
Gardenia. A very large white	8.00	75.00					
Olivette. This seems to be the bread and butter variety for which we are looking..	8.00	75.00					
Joan Marie, (Pat.). Plenty of this still grown.....	7.00	60.00					
Puritan. One of the newer whites that has made good.	5.00	45.00					
Patrician. Still popular...	5.00	45.00					
Senator. Many Midwest growers like it.....	6.00	50.00					
White Peter Fisher. New last year, should sell well, grows the same as its parent	8.50	75.00					
YELLOW:							
Maine Sunshine. Has been grown for years.....	7.00	60.00					
Moonbeam. Yellow	12.00	100.00					
Golden Wonder, good. Has faint lines of pink at times	6.00	50.00					
Yellow Gold, (Pat.). Clear yellow	12.00	100.00					
PURPLE:							
Royal Purple, (Pat.). Some grown	12.00	100.00					
Potentate. Some grown....	6.00	50.00					
CRIMSON:							
Seth Parker, (Pat.). Looks like a winner. Not quite as deep as Woburn.....	20.00	150.00					
Woburn. The old standby in this class	7.00	60.00					
			Wivelsfield	Crimson. An English introduction. Some like it	10.00	90.00	
			Joyce. This seems to be well liked. Not as dark as Woburn	10.00	90.00		
			RED:				
			King Cardinal, (Pat.). The outstanding red	12.00	100.00		
			Barbara Farr. Light red sport of Spectrum Supreme	7.00	60.00		
			Spectrum Supreme. Still grown in quantity.....	6.00	50.00		
			Rigoletto. A Dept. of Agriculture Introduction	5.00	45.00		
			DEEP PINK:				
			John Briry. A few plants were sold last season. It looks very promising.....	20.00	150.00		
			Clark's Beauty. A newer variety. Does well in some localities	8.50	75.00		
			Dirigo. A newer one, has shown promise	8.50	75.00		
			Dark Pink Virginia. Growers seem to think it is almost like Virginia Rose.....	8.50	75.00		
			Virginia Rose. Rose sport of Virginia	8.50	75.00		
			Paragon. Did not seem to do as well as it was hoped for	6.00	50.00		
			Peter Fisher. A fine bread and butter variety. Grown by many	6.00	50.00		
			Carlotta. A Dept. of Agriculture introduction	5.00	45.00		
			New Deal Ward. The best liked of the ward sports..	6.00	50.00		
			Eddie G. Did not have a large sale. It may be O. K.	8.00	75.00		
			Pink Abundance. An old stand by	5.00	45.00		

Red And Crimson Shades Are Gaining Popularity Every Season

Standard List (Continued)

Pink Treasure, (Pat.). Large medium pink	20.00	150.00
Vivian. Popular in some parts	5.00	45.00
My Love. Still liked by many growers	6.00	50.00
Del Ray. The favorite in some sections	6.00	50.00
Boston Ward. Still grown.	6.00	50.00
York Beauty, (Pat.). Big, showy flower	10.00	80.00
Breiter's Pink. A producer and money-maker	8.50	75.00
Rosalie. Ward color medium size flower. Good stems. Free grower. (Pat.).....	20.00	150.00
Dark Pink Maytime. See "New and Recent" page...	10.00	90.00

LIGHT PINK:

Pollyanna, (Pat.). See "New and Recent" page for full description	15.00	125.00
Sea Shell. See "New and Recent" page for full description	15.00	125.00
Charm, (Pat.). Introduced last year. Looks very good. Color slightly darker than Laddie almost as large and produces almost twice as many blooms. Good keeper	20.00	150.00
Hermosa. Beautiful new light pink	8.50	75.00
Giant Laddie. A salmon pink sport of Laddie, larger flowers, deeper color.....	10.00	90.00
Maytime. Lovely shell-pink with long, stiff stems. Very free grower, good keeper, with large flowers.....	7.00	60.00
Albania. Light pink.....	12.00	100.00
Eleanor. A fine light salmon pink	6.00	50.00
Virginia. Largely grown..	6.00	50.00

Mrs. C. B. Johnson. Light salmon pink	6.00	50.00
Berkshire Hills. Sport of Patrician	6.00	50.00
Ruth Hengstenberg. Flesh pink	6.00	50.00

VARIEGATED:

Coronet. Yellow variegated	15.00	125.00
Lochinvar. Garnet with orchid edge. Similar to Pelargonium	15.00	125.00
Pharaoh. Similar in coloring to Chief Kokomo. It is looking good	8.50	75.00
Pelargonium. White overlaid with crimson maroon..	10.00	90.00
Chief Kokomo, (Pat.). Orange yellow with red pencilings	12.00	100.00
Barbara Brigham. Apricot with pink pencilings. Sport of Golden Wonder.....	6.00	50.00
Opal, (Pat.). Purple and White variegated	12.00	100.00
Delicacy Improved. White with many pink pencilings.	8.50	75.00
Dimity. White with deep claret pencilings	7.00	60.00
Suntan. Yellow with pink pencilings	10.00	90.00
Dairy Maid. White with pink pencilings	7.00	60.00
Lenora. Pink and white variegated	5.00	45.00

ALL ORDERS FILLED IN ROTATION. FOR EARLY JANUARY DELIVERY, SEND IN YOUR ORDERS AT ONCE.

25 R. C. @ 100 RATE
250 R. C. @ 1000 RATE

The Novelty Variegated Types Are Attractive Corsage Material

A Word About GRAVEL CULTURE

Vic

Much talked about, much written about, gravel or soilless culture was presented to the trade by Purdue University just 4 years ago. First hailed by the rank and file as a panacea for our soil ills, experience has shown that, rather than simplifying our soil problems, it calls for mastery of a new way of growing in some respects more difficult and exacting than time honored soil culture. A few, probably not over 20 or 25 growers in all, have, thru study or schooling and experience, acquired what

knowledge is available and with it an inkling of what soilless culture will have to offer once it passes its "growing pains."



Young Carnation plants just getting "under way" in gravel at West Chicago. Our plantings for this year include around 2000 of them in gravel, also Mums, Snaps, Geraniums, and Stocks in season. Glad to have you look them over.

About 12,000 sq. ft. of our range of today is devoted to soilless work. On the basis of careful records accumulated over 3½ years, we find the total cost of converting a house already equipped with wooden benches over to gravel to be about 12c per sq. ft.—including waterproofing, motor and pump, clock, tank, fittings, etc. This cost is spread or "depreciated" over about ten years, so will add about 5% to our annual costs. Saving in watering, cultivating, weeding, etc. will decrease costs about 15% leaving a net saving of around 10%,—quite considerable in the face of today's close margins. We should add to this saving an increase in yield and quality of perhaps 15 to 20%—and you see why gravel culture is an encouraged project wherever costs are kept.

Not too fast tho! We are free in stating that the small scale and experimental nature of our gravel crops thus far have kept most of them in the red. A recent installation of around 6,000 sq. ft. all in gravel will definitely determine the practicability of large scale operations.

These are problems we try to do our share in solving. Whatever we may learn is yours for asking. We like to call it "Ball Service."



"Vic" on left, and John Bonhard, in charge.

CARNATIONS AT WEST CHICAGO

This is the cleanest and most successful house we have ever grown. Beautiful color, growth and stems when photoed October 5. The young stock was grown in three inch wooden plant bands. They were planted in the field with the bands. For our conditions this seems a very good compromise on out-right field culture and planting directly inside. Greenhouse benches were filled with fresh soil from the field. Tho it had grown several crops of Soy beans, it tested low in the three main elements, particularly phosphate. For this reason 5-6 lbs. of 45% acid phosphate per 100 square feet of bench space was added before planting. Nothing further was added to this rather lean soil except some quite strawy manure on bottom of the bench. Planting indoors was done July 10-15. With the wooden bands they lifted easily with the original ball of soil intact when the bands were removed in planting. After the first watering they were kept on the dry side for several weeks, after which they have been well watered about once a week; but watering will of course vary with soil and weather. Fulex has been used several times to clean up light out-breaks of spider. Nearly all varieties were topped until August 20. On September 15, a top dressing of 5-15-5 was applied at the rate of 4 lbs. per 100 feet. Nothing further will be fed them until well into January. These suggestions are made for the purpose of telling you how we did it. Conditions with you might be very different. Varieties largely used are; King Cardinal, Peter Fisher, Puritan, Patrician, Woburn, Spectrum Supreme, Virginia, Chief Kokomo, Golden Wonder, My Love, listed in order of value as we find them.

We invite you to come out and look them over.

Better Mums
for 1941

Gro. J. Ball
INC.
WEST CHICAGO
ILLINOIS

Better Carnations
for 1941